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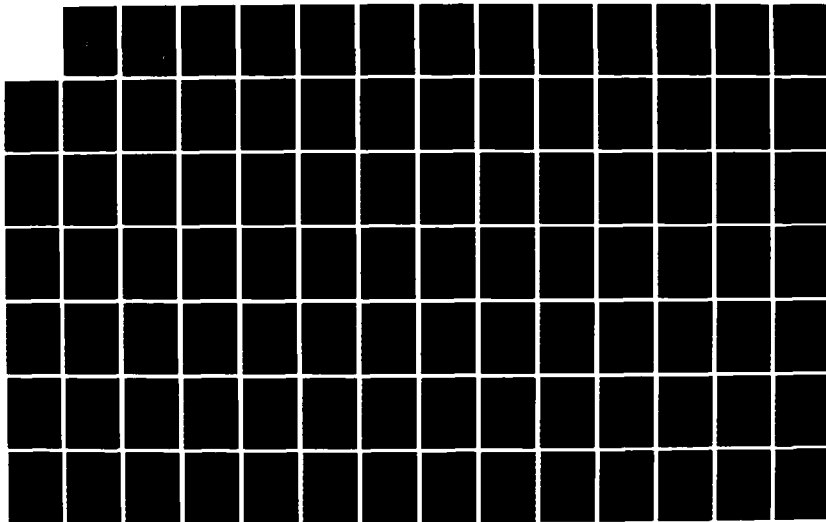
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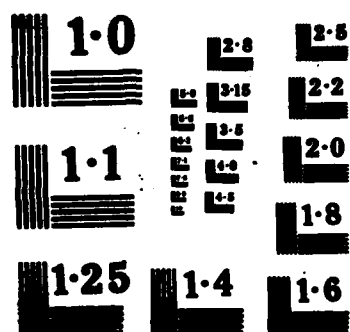
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THE SOUTHERN CONE AND ANTARCTICA:
STRATEGIES FOR THE 1990'S

By

JEFFERY F. WHITE

A THESIS PRESENTED TO THE GRADUATE SCHOOL OF
THE UNIVERSITY OF FLORIDA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ARTS

University of Florida
Center for Latin American Studies
Gainesville, FL 32611

UNIVERSITY OF FLORIDA

1986

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With love and thanks to my wife, Paula, for her patience,
to my daughter, Erika,
and to my parents
for their encouragement through the years

ACKNOWLEDGMENTS

The writer would like to thank the members of his committee for their patience and guidance during the preparation of this thesis.

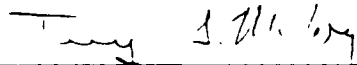
BIOGRAPHICAL SKETCH

Jeffery F. White was born in New Milford, Connecticut, on 19 August 1954, the son of Louis C. White and Arlene G. White. After graduation from New Milford High School he entered Widener College in 1972. He received the degree of Bachelor of Arts in international relations and political science in 1976 and was commissioned a Second Lieutenant in the United States Army.


He has served with the First Armored Division in the Federal Republic of Germany and with the 194th Armored Brigade at Fort Knox, Kentucky, as a field artillery battery commander and brigade fire support officer. He is a graduate of Airborne and Ranger schools, the Field Artillery Officer Advanced Course, the Combined Arms and Services Staff School, and Command and General Staff Officer Course, and was the distinguished graduate of the Foreign Area Officer Course and the Defense Language Institute Spanish Language Program. From May 1985 to August 1986 he pursued the Master of Arts degree under the Foreign Area Officer Program of the United States Army.

Captain White is married to the former Paula Ellis of Louisville, Kentucky, and the father of one daughter, Erika Leigh.

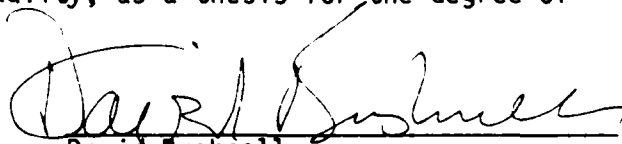
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Professor of History

This thesis was submitted to the Graduate Faculty of the Center for Latin American Studies, to the College of Liberal Arts and Sciences, and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Master of Arts.

August 1986


Director, Center for Latin
American Studies

Dean, Graduate School

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Abstract of Thesis Presented to the Graduate School of the
University of Florida in Partial Fulfillment of the Requirements
for the Degree of Master of Arts

THE SOUTHERN CONE AND ANTARCTICA:
STRATEGIES FOR THE 1990'S

by

Jeffery F. White

August 1986

Chairman: Terry L. McCoy
Major Department: Latin American Studies

This thesis is an analysis of the strategies which may be adopted by Argentina and Chile in order to maximize the political, economic, and strategic benefits from their overlapping territorial claims in the Antarctic. Included in this study is a discussion of the history of human activity in Antarctica and of the Antarctic Treaty of 1961. The role of Antarctica in the world system is examined with regard to the proven and anticipated resources of the region as well as the status of applicable exploitative technology and contending positions on the future administration of the region. Additionally, the relationship between the Southern Cone of South America and the American Quadrant of Antarctica is examined with particular attention to the importance of Antarctica in South American geopolitical writings.

Four possible scenarios are dissected from the realist perspective and evaluated as to their likelihood as Argentine and Chilean Antarctic strategies in the coming decades. Unilateral occupation of the American quadrant by a claimant and the cession of claims to an international authority are concluded to be unlikely

policies. The strategy which best advances Argentine and Chilean national objectives from a realist perspective is for the claimants to continue to work within the Antarctic Treaty system. The formation of a South American bloc is a likely strategy if the Treaty system fails to satisfy Argentine and Chilean interests in the Antarctic.

Terry L. McLay
Chairman

CHAPTER 1 INTRODUCTION

Antarctica is unique, an entire continent of disputed territory which has enjoyed an unusually protected status since the ratification of the Antarctic Treaty in 1961. The Treaty has insulated the region south of 60° South Latitude from overt competition for over a quarter of a century.¹ Even as the continent has thus far been spared the clash of national competition, powerful political, economic, and technological currents are converging which may cause profound changes in the future of Antarctica. The Antarctic Treaty itself may be amended any time after June 1991, and nations with territorial claims or other objectives in the region are diligently preparing to advance and to justify their interests against other states. The world's growing industrialization and burgeoning population are sharpening the appetite for scarce resources, and Antarctica is fast becoming the object of speculation as a vast, untapped cornucopia of natural resources. Advances in extractive technology applicable to harsh polar conditions are fueling hopes of actual exploitation by the end of this century.²

The objective of this thesis is to analyze the strategies which have been adopted and may be advanced by Argentina and Chile, two rival claimant states, in order to maximize their political, economic, and strategic benefits from their Antarctic claims. Argentina and Chile are the subjects of this analysis because, of the many nations

interested in Antarctica, they are not only the most closely linked with the region geographically and historically, but have elevated and incorporated their Antarctic claims in their development strategies and foreign policies.

This thesis adopts a realist approach to the study of international relations and posits autonomous nation-states pursuing their individual interests as the basic actors. All states are assumed to share the fundamental objectives of maximizing national power, control, and wealth.³ Accepting those objectives, the strategies that will best promote Argentine and Chilean national interests in Antarctica against rival claimants from the industrialized and Third Worlds may reasonably be expected to be the policies that they will adopt. Identifying those likely strategies is the objective of this thesis.

In the first chapter of this thesis, I will review the history of human activity in Antarctica and examine the Antarctic Treaty regime as an instrument of member states' national interests in the past and its applicability as a framework to protect those interests in the future. The first section also summarizes the bases for claims in the Antarctic and assesses their relative legal validity and their relevance to any future award of sovereignty. The second chapter examines Antarctica and the world system. The proven and anticipated resources of the region as well as the status of applicable exploitative technology will be analyzed. The contending positions for the future administration of Antarctica and its resources will be summarized. The third chapter focuses on the relationship between Antarctica and the Southern Cone of South America with particular

attention to the importance of Antarctic claims in the extensive and influential geopolitical writings of the region. The conclusion will dissect possible scenarios for the Antarctic within the framework of realist thought and draw some conclusions about strategies which might be expected to be followed by Argentina and Chile in order to most effectively support their national objectives in the region. It is hoped that this analysis will contribute to the understanding of the dynamics of the politics involved in the race for the Antarctic as well as offer some insight into the behavior of two critical actors in the South Polar region.

The study of the political aspects of Antarctica is a fairly specialized field. There are several works on the region which are indispensable including F.M. Auburn's Antarctic Law and Politics, Philip W. Quigg's A Pole Apart, Antarctic Resources Policy, edited by Francisco Orrego Vicuña, and Oscar Pinochet de la Barra's seminal work La Antártida Chilena. Also invaluable is the annual Antarctic Bibliography published by the Library of Congress.

Notes

¹F.M. Auburn, Antarctic Law and Politics (Bloomington: Indiana University Press, 1982), p. 1.

²Philip W. Quigg, A Pole Apart: The Emerging Issue of Antarctica (New York: McGraw-Hill Book Co., 1983), p. 98.

³Perhaps the best recent work on the application of the realist approach to the Third World is that of Steven D. Krasner, Structural Conflict: The Third World Against Global Liberalism (Berkeley: University of California Press, 1985).

CHAPTER 2 ANTARCTICA: THE LEGAL AND POLITICAL BACKGROUND

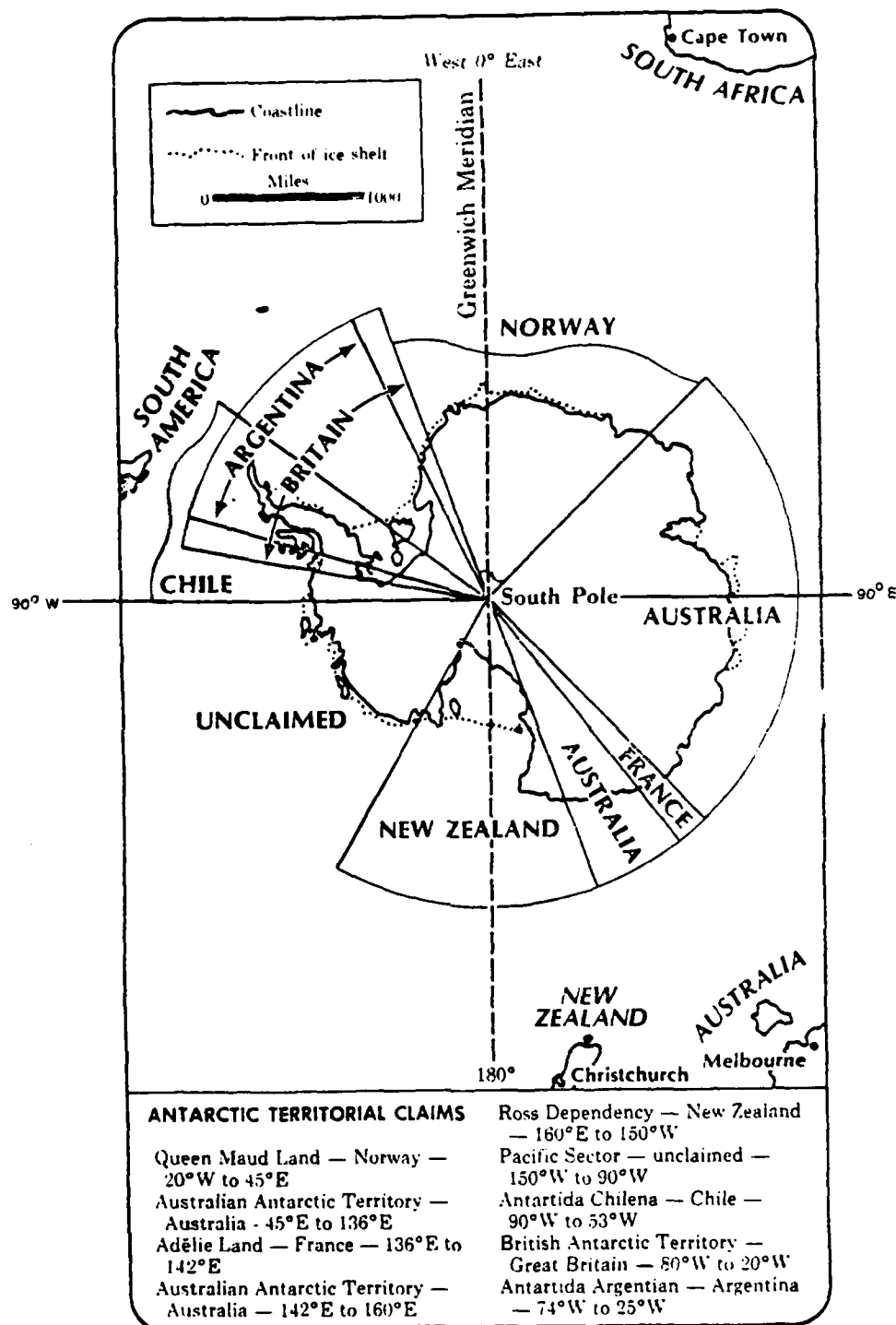
Terms

Geographic Scope

The Antarctic Treaty applies to the land area located "South of 60° South Latitude, including all ice shelves," but not affecting the high seas within that region.¹ The Treaty definition does not correspond to the Antarctic Convergence, where cold polar waters meet warmer waters, and excludes several small island groups sometimes associated with the Antarctic, but it lies within the northern limits of five claims.² The region has been traditionally subdivided into four quadrants: the African, Australian, Pacific, and American (see Figure 2-1). Of the four, the American quadrant, containing the Antarctic Peninsula, is by most reckoning the most important. It is also the most accessible and contentious as revealed by the overlapping claims of Argentina, Chile, and Great Britain located there. This thesis is primarily concerned with the American quadrant.

Place Names

When studying the Antarctic, place names are a problem as a single feature may have different names depending on the national inclination of the writer or cartographer. The Antarctic Peninsula, for example, is listed in at least four other ways: Palmer Peninsula



SOURCE: Marc Leepson, "Future of Antarctica,"
Editorial Research Reports 1 (June 1982):474.

FIGURE 2-1

EXTANT CLAIMS IN THE ANTARCTIC

(US), Graham Land (UK), Tierra San Martín (Argentina), and Tierra O'Higgins (Chile).³ For the purposes of this thesis the most common usage terms will be employed and supplemented by other names as needed for clarity.

History of Human Activity in Antarctica

The Age of Exploration: 1820-1939

Credit for the discovery of Antarctica is variously claimed by the United States, Great Britain, and the Soviet Union. Indeed, within a few months of one another in 1820, American, British, and Russian ships were in the vicinity of the continent, but whether they all actually sighted the mainland or only offshore islands or pack ice remains unclear.⁴ In any case, after a few subsequent landfalls by other explorers during the 1830's, interest in Antarctic exploration waned. For the next half century only sealers and whalers visited the northern reaches of the region.

At the turn of the century interest picked up again. Argentina, Belgium, Great Britain, France, Germany, Japan, Sweden, and Norway undertook limited Antarctic expeditions. Small groups made the first inland journeys from coastal and island base camps. Heroic efforts to reach the South Pole were led by Ernest Shackleton in 1907 and Robert F. Scott and Roald Amundsen in 1911. The latter two expeditions were successful but at the cost of the entire Scott party. The next phase of exploration was by air, most notably by Admiral Richard Byrd of the United States in the late 1920's and early 1930's. With the deepening of the Great Depression, expeditions tapered off in the

latter 1930's.⁵ The heroic age of Antarctic exploration (1895-1939) was oriented on the Pole itself and was based in the Australian quadrant because of the proximity of the Ross Ice Shelf to their goal.

Argentine contributions. Argentine activity in the Antarctic is generally dated from 1903 when the Argentine gunboat Uruguay completed Argentina's first voyage through Antarctic waters while rescuing the Nordenskjold expedition from the Snow Hill Islands. In February of the following year, the Scottish National Antarctic Expedition on Laurie Island in the South Orkneys turned over the meteorological station there to Argentine representatives.⁶ In the ceremony of transfer, the Scottish flag was lowered and was replaced by that of Argentina.⁷ In addition to the flag ceremonies, the first postal facility in Antarctica was inaugurated with a quantity of Argentine stamps and a cancellation block inscribed "ORCADAS DEL SUR DISTRITO 24 (GALLEGOS)."⁸ The Laurie Island station has been continuously occupied by Argentines since 1904 and, for the next 40 years, was the only permanent station in the Antarctic.⁹

Although the station at Laurie Island was maintained, few major initiatives were undertaken during the next two decades. In 1914 there were negotiations with Great Britain to transfer the entire South Orkneys group to Argentina in exchange for some real estate in Buenos Aires which was to be the site of a new British embassy. A change in government in Buenos Aires prevented the deal. Argentina made its first overt claim to sovereignty in the Antarctic in 1925 when it rejected British objections to the establishment of a wireless station at Laurie Island.¹⁰ In 1927, the Argentine government

notified the International Postal Bureau at Berne that it would no longer recognize British stamps for either the South Orkneys or South Georgia.¹¹ Argentine interest was limited until World War II.

Chilean contributions. The Chilean government was less active in the pre-war years than Argentina as it sponsored no expeditions or permanent presence. In 1906 an expedition deputized to firmly establish Chilean title to the islands and continent was planned but cancelled after a disastrous earthquake in Valparaíso diverted the earmarked funds. The key year in Chilean Antarctic activities is 1906, not only for the aborted expedition, but for two other measures by which Chile stated its Antarctic claim. A fishing concession was awarded to two Chileans (Concesión Fabry-De Toro Herrera) who were additionally charged with assuring Chilean dominion over the Diego Ramírez, South Shetland, South Georgia, and Antarctic Peninsula region. That same year, the government authorized the Sociedad Ballenera de Magallanes to operate in Antarctic waters. The whalers established a base on Deception Island, which they used until abandoning it in 1911. Sporadic whaling by the Sociedad continued until 1916.¹² Active Chilean interest, even at the private level, disappeared until the end of the 1930's.

Antarctica and World War Two

Increasing tensions in Europe during the late 1930's led to a flurry of territorial claims in the far south. The German catapult ship Schwabenland with two seaplanes appeared off the Antarctic coast. A number of flights were conducted and markers were dropped claiming the area for the Reich.¹³ Alarmed by the German presence on the

Antarctic mainland, France and Norway staked their wedge-shaped claims to portions of the continent in 1939.

The Declaration of Panama, issued in September 1939, established a neutral zone which included some islands and waters in the Antarctic. On 24 May 1940, US Secretary of State Cordell Hull said, "Considerations of continental defense make it vitally important to keep for the 21 American republics a clearer title to the Antarctic continent south of America than is claimed by any non-American country."¹⁴ Encouraged by Hull's pronouncement and concerned about Norway's claims, President Pedro Aguirre Cerda declared Chilean rights in the Antarctic at the Pan-America conference in Havana and issued an executive decree on 6 November 1940 (Decreto No. 1707). The decree laid out the Chilean claim as the lands and ice packs lying between 53° and 90° West Longitude, citing geographic, historical, legal, and diplomatic rights to that sector.¹⁵

The official Argentine Antarctic claim was delimited during a highly publicized voyage by the Primero de Mayo in 1942. The vessel visited Deception Island, Melchior Island, and Winter Island near the tip of the Peninsula. At each landing the crew raised the Argentine colors and deposited bronze tablets which claimed the area south of 60°South and lying between longitudes 25°West and 68° 34'West. The following year the Primero de Mayo returned to Antarctic waters with three Chilean observers aboard and discovered that the tablet left at Deception Island had been removed by a British warship and had been replaced by a notice to the effect that the whaling station was Crown property. A tablet was reinstalled and an exchange of polite notes

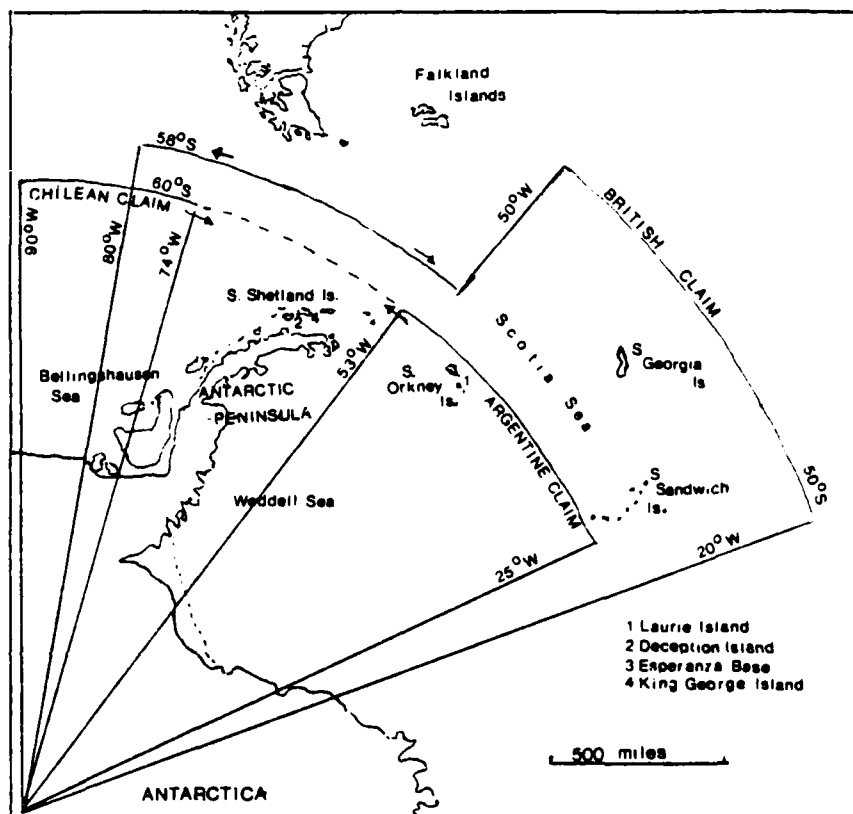
between the governments ensued. No other action to further Argentine claims occurred during the remainder of the war.¹⁶

The Antarctic did have a small role in combat operations. Beginning in 1940, German raiders operating in Antarctic waters attacked allied cargo ships and sank the light cruiser Sidney. From 1943 to 1945 one small British ship plied the waters near the Peninsula to deny the harbor at Deception Island and other sheltered spots to the Germans and to prevent the Argentines from seizing the south side of the Drake Passage.¹⁷

Intensified Territorial Competition

After World War Two, confrontations between the three claimants of the American quadrant became more frequent as stations and expeditions proliferated.¹⁸ Argentina and Chile were in an economic and political position to expand to their austral limits while Great Britain was determined not to cede its Antarctic claims, which had been established by discovery and reinforced by an extensive record of exploration.

Argentine activities. After 1946 Juan Perón stabilized the domestic situation and elevated Antarctica to the level of a principal political, diplomatic, and military concern. In early 1947, Perón dispatched a major expedition of seven ships to the Peninsula. He also launched a vigorous domestic campaign to make the Argentine people more aware of their polar interests. The expedition established a second permanent Antarctic base at Melchior Island and exchanged protests with members of a Falkland Islands Dependency



SOURCE: Marshall Van Sant Hall, "Argentine Policy Motivations in the Falklands War and the Aftermath," Naval War College Review 36 (November-December 1983):27.

FIGURE 2-2
CLAIMS IN THE AMERICAN QUADRANT

Survey team at anchor at Deception Island before returning to Buenos Aires and to an enthusiastic reception.¹⁹

Argentina took several administrative steps at that time to formalize its claims to the Antarctic. The western boundary of the territorial claim was amended from 68° 34'W--the longitude of Tierra del Fuego--to 70°W, which is the westernmost point in mainland Argentina.²⁰ In April 1948, the Argentine Antarctic and the South Atlantic islands claimed by Argentina were included in the jurisdiction of the governor of Tierra del Fuego by Executive Decree No. 9905.²¹ Diplomatic correspondence between the Argentine and British governments over Antarctica continued but deteriorated in tone. The publicity given the series of acrimonious exchanges made for an atmosphere of some tension by the start of the 1947-1948 exploring season.

The increased political tension was reflected in a considerably stiffened Argentine presence. In January 1948, a detachment of Argentine mountain troops was sent to Antarctica. By the third week of February the bulk of the effective strength of the Argentine Navy was marshalled near Deception Island, but the maneuvers concluded before any serious confrontation with the nearby British station. The crisis atmosphere receded somewhat after a visit by the Argentine Foreign Minister to London at the end of 1948 and an agreement by both parties not to send warships south of 60° South Latitude.²²

The Anglo-Argentine Antarctic rivalry continued to be keen, but less explosive during the next decade. An exceptional event of that period occurred in Hope Bay at the tip of the Peninsula when Argentine troops fired a burst of machinegun fire over the heads of a party of

British sailors who were unloading supplies. There were no casualties, and the Buenos Aires government eventually apologized.²³

Chilean activities. Not long after the end of World War Two, Chile resumed its Antarctic activities after a long hiatus. In 1947 the first Chilean Antarctic expedition since the rescue of the unfortunate Shackleton expedition of 1916 was dispatched from Valparaíso. Soberanía Base was constructed at Greenwich Island, one of the Shetland Group, and the navy lieutenant in charge of the base was named Governor of the Chilean Antarctic.²⁴ On several occasions the Chilean ships encountered British vessels and at each opportunity, formal protests were exchanged. A second Chilean base, Bernardo O'Higgins, was inaugurated by President González Videla who sailed from Punta Arenas for the occasion with his family, various ministers and legislators, and the three service chiefs to become the first chief of state to visit Antarctica.²⁵ Three more Antarctic bases belonging to the various Chilean military services were established between 1951 and 1957. The fundamental mission of the bases was to bolster Chilean sovereignty in the austral latitudes.²⁶ As part of a broad program to familiarize the population with their patrimony, the Chilean National Airlines began passenger overflights of Antarctica in 1956.²⁷

While there were three nations with overlapping claims in the American quadrant, Argentina and Chile directed their ill-will at Great Britain, and Argentina was the more aggressive of the two Southern Cone claimants. Neither Argentina nor Chile seemed unduly concerned with the other's overlapping claim as they had issued successive joint declarations, beginning in 1947, for defending their

mutual interests and rights pending an opportunity to delimit their respective sectors.²⁸

The Inter-American Treaty of Reciprocal Assistance. The Rio Treaty of 1947 seemed to encourage both Chilean and Argentine Antarctic aspirations. The Pact provided for an American Defense Zone extending to both Poles and including the Antarctic sector from 24°W to 90°W--a slice almost identical to the combined Chilean-Argentine claims. The inclusion of the Poles in the Rio Treaty was a considerable coup for Argentine and Chilean diplomacy as it clearly excluded the British from the Antarctic and, it was supposed, brought the United States into the rivalry in support of an exclusive American quadrant.²⁹

Era of Cooperation

International Geophysical Year. The high level of political tension that had persisted in the American quadrant since the end of World War Two was defused by a series of cooperative initiatives originating in the scientific community. The most successful was the International Geophysical Year (IGY) held from 1 July 1957 to 21 December 1958. During the 18-month year, 5000 scientists from 56 nations performed intensive investigations world-wide. Researchers from 12 nations carried out geophysical research in Antarctica during the IGY.³⁰

Representatives of the 12 nations that participated in the Antarctic portion of the IGY met in Washington beginning in October 1959 and signed the Antarctic Treaty that same year. The provisions of the Treaty and the motivations of the signatories will be examined

in some detail below, but, briefly, it demilitarized the Antarctic, guaranteed freedom of scientific investigation, and suspended all territorial claims in Antarctica.³¹ With the Treaty, the period of confrontation between territorial claimants ended and the interested countries peacefully proceeded to expand their Antarctic presence.

Argentine presence. Since 1961 Argentina has continued to augment its presence in Antarctica both for the scientific purposes envisioned by the framers of the Treaty and to demonstrate its national intention to settle its claim as an Argentine frontier. The effort was undertaken with an eye to reinforcing claims to effective occupation and arousing public enthusiasm for Antarctic pioneering.³²

In order to build on its record of effective occupation, a number of highly publicized measures have been sponsored by the Argentine government. Presidents Lastiri and Isabel Perón flew with their entire cabinets to Marambio Base and proclaimed it the temporary capital of the Republic.³³ In 1977, families, including a pregnant woman, were settled in Esperanza Base, and in January 1978 Emilio De Palma became the first Antarctic baby.³⁴ The next month a series of weddings were performed, one of which--filmed and shown on Argentine television--featured the arrival by icebreaker of the bride, her family, and the priest.³⁵ Ten families are routinely quartered near the base and are supported by a priest and school facilities for the 16 children.³⁶ The highly publicized settlement at Esperanza Base and other acts led analysts to conclude that Argentina intends to be in a position to demonstrate the strongest possible case for effective occupation of the American quadrant of Antarctica.³⁷

Argentine operations, like many other nations' Antarctic activities, have a strong military presence. Of the eight permanent stations that Argentina maintains, seven belong to either the Army, Navy, or Air Force. The last, Almirante Brown, is operated by the Dirección Nacional del Antártico.³⁸ The DNA was created in 1969 to function as the principal agency to advocate the Argentine Antarctic and is directly subordinate to the Ministry of Defense.³⁹ The Argentine naval presence in Antarctic waters has been bolstered by the purchase of two ice-reinforced ships since 1970.⁴⁰

Argentina has maintained a significant and conspicuous presence in the Antarctic which goes beyond what would be needed for purely scientific pursuits. The political objective has been to visibly settle the frontier as though it were contiguous territory and, under DNA auspices, to introduce the general population to its austral patrimony.

Chilean presence. Chilean efforts to establish an indisputable basis for title to its Antarctic claim have been similar, and nearly as extravagant, as those of Argentina. Scientific projects are a portion of the greater objective of building a case for effective occupation. To that end, bases have been maintained and settlements have received wide publicity.

The showcase Chilean settlement is the Teniente Rodolfo Marsh complex on King George Island at the tip of the Peninsula. The base itself has 48 servicemen assigned and is adjacent to the Villa de las Estrellas, where 12 families have lived since early 1984. The 43 inhabitants of the Chilean village live in comfortable prefabricated housing and have increased their number by three births since November

1984.⁴¹ The plan is to make the base the gateway to the Antarctic and to turn a profit by providing services to the scientific and tourist traffic. Already the base is the arrival point for half of all research expeditions to Antarctica.⁴² The base is regularly serviced by tourist flights and C-130 cargo aircraft and provides hotel space for 40 visitors, a gift shop, post office, clinic, schools, and the first Antarctic banking facility.⁴³ The elaborate plans call for an eventual population of 300-400 citizens of Chilean Antarctica.⁴⁴ The elaborate base is an innovative attempt to bolster sovereignty and have others defray the considerable costs.

Chilean heads of state have visited Antarctica on four occasions: Presidents González Videla and Frei to inaugurate bases, and visits by President Pinochet in 1977 and 1984.⁴⁵ As with Argentina, the bases are commanded and staffed by military personnel drawing generous hardship pay.⁴⁶ Chile, no less than Argentina, has gone to great expense and effort to maintain a number of permanent bases and settlements which might generously be regarded as serious attempts to colonize the Antarctic frontier.

Other South American presence. A number of other nations are represented in the quadrant. On King George Island, Teniente Marsh base shares the 24-mile island with stations from Argentina, USSR, Poland, China, Brazil, and Uruguay. The Brazilian and Uruguayan stations are fairly recent additions, and by all accounts all get along quite amicably in that relatively hospitable part of the Antarctic.⁴⁷

Brazil's interest in the Antarctic has been considerably less intense than that of Chile or Argentina. As far back as 1958 Brazil

reserved its right to make a claim and refused to recognize existing ones.⁴⁸ Brazil had tried to buy the HMS Endurance for Antarctic operations prior to the Falklands War but settled for an older Danish ship instead.⁴⁹ Delivery of a second polar vessel is expected in 1989. The first Brazilian encampment was the Commandante Ferraz on King George Island in 1984. The base was visited by the Brazilian Navy Minister, Foreign Minister, and Minister of Science and Technology during the 1985-86 austral summer. They took the opportunity to reaffirm Brazil's intention to expand its Antarctic presence in the coming years. The year-round base is generally considered to be a concrete indication of Brazil's determination to participate in any eventual decisions to be made about Antarctica.⁵⁰

Uruguay's first Antarctic encampment was established in January 1985 by Uruguayan soldiers.⁵¹ That nation has had a commission on Antarctic studies since 1970 and an official Antarctic institute, organized under the auspices of the Foreign Office, since 1975. Like Brazil, Uruguay has no official claim in Antarctica.⁵² No other South American countries have undertaken any noteworthy activities in the Antarctic.

Legal Bases of Claims

The sectors of the three claimants in the American quadrant overlap so completely that the major parts of both the Chilean and British claims are coveted by others, and the entire Argentine sector is in dispute. Experts from the claimant states have constructed legal arguments to support their sovereignty in their respective sectors. The scholars are remarkable in their uniformity of support

for their own government's claim, the Anglo-Saxons no less than the others.⁵³ Because the legal opinions are strongly held and are a potential basis for a future Antarctic regime, some examination of the legal bases of the claims is warranted.

Effective Occupation

Effective occupation is the only internationally recognized method of perfecting legal title that is applicable to Antarctica. There is, however, widespread disagreement on how the concept applies to an unpopulated area with a climate that precludes normal habitation.⁵⁴ Not surprisingly, Argentina relies heavily on the effective occupation argument on the strength of its maintenance of the Laurie Island station since 1904, the series of administrative acts, and the Esperanza Base settlement mentioned above. Argentine legalists point out that other nations were not serious about claiming Antarctica until Argentina had been patiently establishing itself for forty years.⁵⁵ Chile, the only other country that relies at all on that legal argument, did not make its first gesture to effective occupation until 1947.

Sector Theory

Argentina is the only claimant that relies on sector theory for its Antarctic claim. The concept that a nation's polar territory could be bounded by extending the eastern and westernmost limits of the state to the Pole was eagerly embraced by Canada and the USSR earlier this century when they were justifying their rights to the

Arctic.⁵⁶ Argentina considers its claim to the South Sandwich Islands--near 25°W--and the westernmost bit of mainland Argentine territory--the west shore of Lago Argentino in Santa Cruz Province, near 74°W--to be its longitudinal limits.⁵⁷ Acceptance of the sector theory would give Argentina a generous slice while neatly excluding narrow Chile. If the island claims are not accepted, though, it could be a two-edged sword for Argentina as it would afford Uruguay and Brazil a sector.

Proximity and Affinity

Both Chile and Argentina insist on their special rights to the Antarctic because they are by far the closest states. In this argument, Chile actually edges out Argentina by some miles by its *possession and occupation of the Diego Ramírez Islands south of Cape Horn.*

Both nations have also seized on geological evidence which shows that the Antarctic Peninsula is a southern continuation of the Andes. The affinity between the Andes and the "Antartandes" is presumed to lend some support to their claim.⁵⁸

Inherited Title

In its assertions of primacy in the Antarctic, Chile refers to the Treaty of Tordesillas and to royal warrants of Charles V which, in 1539, granted Pedro Sanchez de Hoz all territory west of 40°W--a line east of the Antarctic Peninsula--and south of the Strait of Magellan to the Pole. At that time Tierra del Fuego was thought to extend

uninterrupted to the South Pole. The grant devolved on Pedro de Valdivia in 1540 and ultimately came under the Captaincy-General of Santiago. A royal decree of 1558, which ordered the authorities in Chile to take possession and report on the lands on the other side of the Strait, is also cited to bolster the contention that Chile had responsibility for the area under Spain and inherited exclusive rights upon independence.⁵⁹

In their analysis of colonial responsibility for the southern lands, the Argentines do not rely heavily on the Treaty of Tordesillas, as that could justify a Brazilian sector embracing part of their current claim.⁶⁰ They assert instead that the Antarctic regions were in the orbit of the Viceroyalty of Río de La Plata and were passed to the United Provinces from Spain.⁶¹

Discussion

Both Argentina and Chile have constructed elaborate legal arguments to support their Antarctic claims, but a dispassionate appraisal of their cases suggests a number of contradictions. There is no question that Argentina has maintained a station in the South Orkneys for over eighty years but there is considerable skepticism whether that, even with settlements such as they and the Chileans have established on small offshore islands, are sufficient basis for presumption of the occupation of the vast hinterland.⁶² The sector theory, too, seems on unsteady ground when one reflects that one leg of the Argentine claim rests on an island chain which it does not effectively control and to which it has only a distant geological

affinity. The other leg is extended from a point high in the Andes and far removed from the coast facing Antarctica.⁶³ The reliance on geographic proximity and geological affinity is less than convincing since the two continents are not all that close--the Drake Passage between them is 600 miles wide--and the geological connection involves the long loop of islands described earlier. The geological argument does not extend to the Pole in any case as the Peninsula is geologically distinct from the greater part of the continent.⁶⁴ Inheritance from Spanish colonial authorities, while widely accepted as uti possidetis juris in Latin America, is impugned by other scholars because Spanish authorities had only the vaguest notion of an Antarctica and certainly had no administrative presence there.⁶⁵

While the Argentine and Chilean legal cases are not altogether convincing, the British case, based on discovery and exploration, is not much more favorably assessed by non-English legalists.⁶⁶ In 1948 and again in 1955 Great Britain prepared a formal application for arbitration before the International Court of Justice but both Argentina and Chile refused to accept the Court's jurisdiction.⁶⁷

In sum, the cases presented by all three claimants are insufficient basis to suppose a favorable ruling even if they would all accept arbitration. More likely is that the issue would be considered too important to risk in court, and the legal arguments will be little more than grist for domestic popular consumption and presentations in non-binding forums.

The Antarctic Treaty

Membership

The Antarctic Treaty ended the era of confrontation mentioned earlier and arguably prevented a scramble for Antarctic claims similar to that in Africa during the 1800's.⁶⁸ The original 12 signatory nations--seven of which were claimant states--have been joined by six additional Consultative Parties and by 14 other countries that have acceded to the Treaty provisions.⁶⁹ The distinction between Consultative and Acceding status is that Consultative Parties are nations which are recognized as having undertaken substantial research activity in Antarctica. Acceding parties do not have the voting privileges of CP's but may present their written and oral positions and attend certain meetings.⁷⁰ Any United Nations member state may accede to the Treaty simply by agreeing to abide by its provisions. Consultative status is conferred by the unanimous vote of the incumbent CP's.⁷¹

Provisions and Limitations

The Treaty is a relatively short document of only 14 articles which protect national interests while keeping the region demilitarized and open for scientific endeavors. Of particular interest is Article IV which suspends territorial claims. Under this article no new claims can be asserted and the claims that existed in 1959 cannot be expanded under the Treaty. Further, no activity conducted under the Treaty can be construed as improving the basis for

any claim. In effect, the issue of sovereignty is swept under the rug.⁷²

The Treaty is intended to run indefinitely but may be reviewed by a conference of all signatories at any time after June 1991 at the request of a Consultative Party. At that time a CP may propose amendments which may be approved by a simple majority. In order for the measure to take effect, however, the amendment must be ratified by all CP's within two years. Withdrawing from the Treaty then becomes an option for a dissatisfied state, but the withdrawal takes effect only after an additional two years. The amendment procedures are necessarily slow and perhaps impossible because of the requirement for unanimity.⁷³

Resources were deliberately not dealt with in the Treaty because of the sensitive nature of the issue. The exploitation of nonrenewable resources is traditionally an integral part of national sovereignty, and trying to force an agreement at the time might have prevented any agreement at all.⁷⁴ As resource exploitation was not imminent in 1959, it was decided to avoid the issue. Legal authorities suggest that there is little that anyone could do if a country decided to move to Antarctica and began to exploit it.⁷⁵

Argentina, Chile, and the Antarctic Treaty

The Southern Cone claimants were among the original signatories, but Argentina, Chile, and Australia--the three most territorialist claimants--were the last of the original 12 to ratify.⁷⁶ At the same time, it was Argentina, Chile, and France that held out against the majority which wanted a treaty of indefinite duration.⁷⁷

Argentina and Chile were suspicious of the Treaty but felt compelled to sign in order to preserve their rights and avoid isolation.⁷⁸ Argentine policy makers recognized that they could not enforce their sovereignty against other powers of the time and would have been excluded from decision-making as well as scientific and technical data. They recognized that if Argentina did not join, the other powers would have gone on with their Antarctic activities and Argentina would have been the loser.⁷⁹ Chile's reasons for signing the Treaty were similar. Both nations insist that other nations' activities must be strictly scientific and that the bases constructed would be temporary and would not modify the status of Antarctica. Their own acts subsequent to the ratification of the Treaty are held to strengthen their claims.⁸⁰

In recent years Argentina and Chile have shifted from suspicion to being among the Treaty's strongest advocates. Where they originally ratified it as a practical instrument to protect their rights, the exclusivity of Consultative Party membership is now seen to have advantages. Both have indicated their refusal to consider participation in any other regime for the Antarctic.⁸¹

Discussion

The Treaty Regime has undergone a number of important changes during its 25 years. Interest which was primarily scientific is now shifting toward utilization of potential resources. In 1959 only a few nations had any interest in the region but now interest is world wide.⁸² The Consultative Meetings have begun to take on the role of a

Legislative body for Antarctica, but the laws that it has to work with do not cover many important issues.⁸³ While many states that have not been admitted to CP membership do not agree, the CP's are determined to preserve the regime as the best way to preserve their privileges in the Antarctic.

Notes

¹Antarctic Treaty, Art. VI, cited by F.M. Auburn, Antarctic Law and Politics (Bloomington: Indiana University Press, 1982), p. 299.

²M.J. Peterson, "Antarctica: The Last Great Land Rush on Earth," International Organization 34 (Summer 1980):381.

³Jorge A. Fraga, Introducción a la geopolítica antártica (Buenos Aires: Dirección Nacional del Antártico, 1979), p. 12.

⁴The purported discoverers of Antarctica were the British captain Edward Bransfield aboard the brig William, the American Nathaniel B. Palmer, captain of the Hero, and an admiral in the Imperial Russian Navy, Fabien Gottlieb von Bellingshausen, a native of the Baltic island of Oesel notes Robert E. Wilson, "National Interests and Claims in the Antarctic," Arctic 17 (March 1964):15-6.

⁵Marc Leepson, "Future of Antarctica," Editorial Research Review 1 (June 1982):479-81.

⁶Christopher C. Joyner, "Anglo-Argentine Rivalry after the Falklands: On the Road to Antarctica?" in The Falklands War: Lessons for Strategy, Diplomacy, and International Law, ed. Alberto R. Coll and Anthony C. Arend (Boston: George Allen & Unwin, 1985), pp. 190-1.

⁷Wilson, p. 19.

⁸E.W. Hunter Christie, The Antarctic Problem: An Historical and Political Study (London: George Allen & Unwin, Ltd., 1951), p. 266.

⁹United Nations, General Assembly, 39th Session, 29 October 1984. Question of Antarctica: Report of the Secretary-General (A/39/583), part 2, vol. I, p. 9.

¹⁰Wilson, p. 20.

¹¹Christie, p. 245. South Georgia is north of 60°S and is not part of Antarctica as delimited by this paper. Still, it is frequently associated with the American quadrant by history and by its geological affinity as a peak of the submerged cordillera that connects the Andes with the Antarctic Peninsula. Other islands formed by the same submarine ridge are the Shag Rocks, South Sandwich, South Orkney, and South Shetland Islands. Only the latter two island groups are south of 60°S explains Marshall Van Sant Hall, "Argentine Policy Motivations in the Falklands War and the Aftermath," Naval War College Review 39 (November-December 1983):29.

¹²Oscar Pinochet de la Barra, La Antártica Chilena, 4th ed. (Santiago: Editorial Andrés Bello, 1976), pp. 81-94.

¹³Wilson, p. 21. Neither East nor West Germany has pressed the issue since the War notes Barbara Mitchell, "Cracks in the Ice," Wilson Quarterly 5 (Autumn 1981):69-70.

¹⁴Wilson, p. 22.

¹⁵Pinochet de la Barra, pp. 97-9.

¹⁶Christie, pp. 268-9.

¹⁷Philip W. Quigg, A Pole Apart: The Emerging Issue of Antarctica (New York: McGraw-Hill Book Co., 1983), p. 120.

¹⁸Great Britain has been a de facto claimant since the King's Letters of Patent of 1908 and 1917 notes Joyner, pp. 200-2. The Letters Patent assumed Antarctic claims in the modified wedge shown in Figure 2-2.

¹⁹Christie, pp. 271-2.

²⁰Wilson, p. 23.

²¹The jurisdiction was later renamed "National Territory of Tierra del Fuego, Antarctica, and the Islands of the South Atlantic" according to Argentine testimony in United Nations, General Assembly, Question of Antarctica, p. 10.

²²Christie, pp. 273-4.

²³Leepson, p. 482.

²⁴Pinochet de la Barra, p. 99; the base was later renamed "Captain Arturo Prat" notes Pedro Romero Julio, "Presência de Chile en la Antártica," Revista chilena de geopolítica, no. 1 (1985):44.

²⁵Wilson, p. 24; Christie, p. 283.

²⁶Romero, p. 45.

²⁷Quigg, Pole Apart, p. 100.

- ²⁸Fraga, p. 20.
- ²⁹Auburn, pp. 56-7.
- ³⁰Leepson, pp. 482-3.
- ³¹Evan Luard, "Who Owns the Antarctic?" Foreign Affairs 62 (Summer 1984):1179.
- ³²María Renée Cura and Juan Antonio Bustinza, Islas Malvinas, Georgias, Sanwich del Sur, y Antártida Argentina (Buenos Aires: A-Z Editora, 1982), p. 93.
- ³³Van Sant Hall, p. 28.
- ³⁴Robert Fox, Antarctica and the South Atlantic (London: British Broadcasting Corp. Publications, 1985), p. 79.
- ³⁵Leepson, p. 472.
- ³⁶Miriam Colacrai de Travesán, "Antártida, geopolítica y futuro," Estrategia 67/68 (Noviembre/Diciembre 1980, Enero/Febrero 1981):27.
- ³⁷Edward S. Milensky and Steven I. Schwab, "Latin America and Antarctica," Current History (February 1983):90.
- ³⁸Fraga, pp. 26-7.
- ³⁹Luis Antonio Morzone, Soberanía territorial argentina (Buenos Aires: Ediciones Depalma, 1978), p. 132.
- ⁴⁰Deborah Shapley, "Arctic, Antarctic: A Polarization of Interests," Sea Power, 15 April 1983, p. 104.
- ⁴¹Mimi Whitefield, "Penguins Giving Way to Babies and Families," Miami Herald, 6 December 1985, sec. A, p. 1.
- ⁴²Richart Bourdeaux, "Pioneers' Life among the Penguins Is Lonely," Washington Post, 22 November 1984, in Information Services on Latin America 29 (November 1984):424.
- ⁴³Whitefield, p. 1.
- ⁴⁴Fox, p. 79.
- ⁴⁵United Nations, General Assembly, 39th Session, 2 November 1984. Question of Antarctica: Report of the Secretary-General (A/39/583), part 2, vol. II, p. 37.
- ⁴⁶Fox, p. 140.
- ⁴⁷Whitefield reports that sunbathing is occasionally possible there.

⁴⁸F.M. Auburn, Antarctic Law and Politics (Bloomington: Indiana University Press, 1982), p. 59.

⁴⁹Shapely, p. 104.

⁵⁰Wilfred A. Bacchus, "The South Atlantic War as a 'Tip of the Iceberg': The ABC Countries' Expansionist Interests in the Southern Atlantic Region," Paper prepared for the annual meeting of the Midwest Association for Latin American Studies, Columbia, MO, 20-21 September 1985, p. 8; "Brazil/Antarctica," Latin America Weekly Report, 28 March 1986, p. 12.

⁵¹"Antarctic Post," Orlando Sentinel, 3 January 1985, sec. A, p. 16.

⁵²Carlos J. Moneta, "Antarctica, Latin America, and the International System in the 1980's," trans. Marjory Mattingly Urquidi, Journal of Interamerican Studies and World Affairs 23 (February 1981):64.

⁵³Quigg, Pole Apart, p. 125.

⁵⁴Ibid., p. 118.

⁵⁵Morzone, p. 121.

⁵⁶Milensky, p. 53.

⁵⁷Fraga, p. 11.

⁵⁸Pinochet de la Barra, p. 22.

⁵⁹Wilson, p. 17; the most thorough discussion of the issue is that of Pinochet de la Barra, pp. 51-67.

⁶⁰Christie, p. 264.

⁶¹Morzone, p. 135.

⁶²Joyner, p. 193.

⁶³An interesting footnote to the Falklands War that has implications for the sector theory was the Argentine occupation of Southern Thule Island in the otherwise uninhabited South Sandwich chain. The Argentine military presence on the British-administered island was discovered by a helicopter from the HMS Endurance in December 1976 but was not made public until 1978. The party was finally removed at the end of the War note Arthur Gavshon and Desmond Rice, The Sinking of the Belgrano (London: Martin, Secker, & Warburg, 1984), p. 8.

⁶⁴Fox, pp. 74, 153.

⁶⁵Auburn, pp. 49-50.

⁶⁶Joyner, p. 204.

⁶⁷Wilson, p. 25; Morzone, p. 133.

⁶⁸Fred Parkinson, "Latin America and the Antarctic: An Exclusive Club," Journal of Latin American Studies 17 (November 1985):435.

⁶⁹Philip W. Quigg, Antarctica: The Continuing Experiment, Headline Series, no. 273 (New York: Foreign Policy Assoc., 1985), p. 62, lists the countries associated with the Treaty:

Consultative Parties

Argentina
Australia
Britain
Chile
France
Norway
Belgium
New Zealand
Japan
South Africa
Soviet Union
United States
Poland (1977)
West Germany (1981)
Brazil (1983)
India (1983)
China (1985)
Uruguay (1985)

Acceding Parties

Czechoslovakia (1962)
Denmark (1965)
The Netherlands (1967)
Rumania (1971)
East Germany (1974)
Bulgaria (1978)
Peru (1981)
Italy (1981)
Papua New Guinea (1981)
Spain (1982)
Hungary (1984)
Sweden (1984)
Finland (1984)
Cuba (1984)

⁷⁰"The Value of the Antarctic Treaty System," Australian Foreign Affairs Record 55 (September 1984):906.

⁷¹Quigg, Continuing Experiment, p. 21.

⁷²Auburn, pp. 104-9.

⁷³James H. Zumberge, "Mineral Resources and Geopolitics in Antarctica," American Scientist 67 (January-February 1979):75-6.

⁷⁴"Australia and the Antarctic Treaty System," Australian Foreign Affairs Record 55 (February 1984):95.

⁷⁵David S. Salisbury, "Antarctica: Geopolitical Football," Technology Review 79 (March-April 1977):80.

⁷⁶Fraga, p. 33.

⁷⁷Van Sant Hall, p. 27.

⁷⁸Morzone, p. 132.

⁷⁹Fraga, p. 32.

⁸⁰Pinochet de la Barra, p. 13; Van Sant Hall, p. 28.

⁸¹Peter J. Beck, "The United Nations' Study on Antarctica, 1984,"
Polar Record 22 (May 1985):502.

⁸²Luard, p. 1184.

⁸³Parkinson, p. 435.

CHAPTER 3 ANTARCTICA AND THE WORLD SYSTEM

In 1775, when Captain James Cook completed the first circumnavigation of Antarctica, he wrote: "I make bold to declare that the world will derive no benefit from it."¹ He has not yet been proven wrong as, to date, science is the principal activity in Antarctica and knowledge is its only export.² Many nations however apparently expect more tangible benefits.

The Antarctic Treaty was ratified at a time when interest in Antarctica was primarily scientific and, in the case of some countries, strategic. Since 1961 industrialization, new technology, the pressures of increasing populations, and declining production from many easily exploited deposits of primary products has sharpened interest in locating new sources of raw materials. As Antarctica has become the focus of much speculation, many nations have developed a keen interest in resources on or near Antarctica and have adopted positions designed to capture that wealth to their advantage.

Antarctic Resources

The economic benefits which may accrue from Antarctic activities are both renewable and nonrenewable. Renewable resources are the rich marine life of the waters of the Southern Ocean, icebergs, and, by some interpretations, tourism.³ The nonrenewable wealth of the continent, associated islands, and the continental shelf is

principally hydrocarbons and hard mineral deposits which are thought to exist. The various resources face different challenges to exploration and development and are currently at varying levels of proven worth.

Living Resources

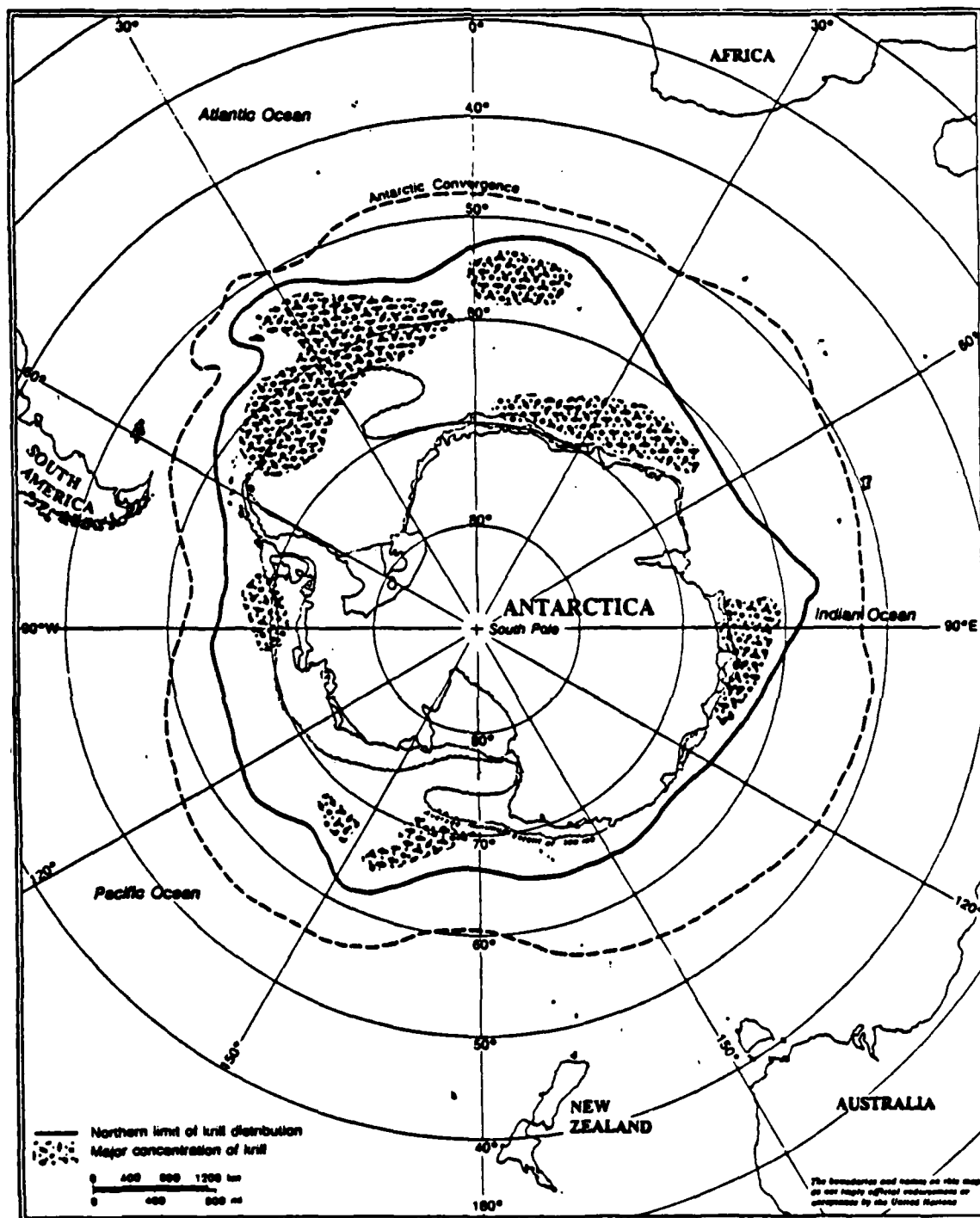
The Southern Ocean teems with aquatic life. Whales, seals, finfish, squid, penguin, and krill abound in the cold, nutrient-rich waters surrounding Antarctica. Whales, as migrating creatures, spend only part of their lives in the Antarctic and are beyond the scope of this work. Penguins, fortunately having no commercial use at present, are also only of tangential interest here. Commercial activity is concentrated on the remaining species.

Finfish and squid. There is some interest in the exploitation of the various species of finfish and squid which can be found in Antarctic waters. Commercial fishing for finfish has occurred near South Georgia and the Kerguelen Islands (French possessions in the African quadrant). Large catches were obtained for only two seasons at each site before the takes declined to low levels. The reduced catch indicates that, because of the species' slow growth and longevity, the stocks in those waters were reduced to below their maximum sustainable yields.⁴ There is no squid fishing in Antarctic waters at present although activities in nearby waters might easily shift southward. The paucity of knowledge about finfish and squid stocks is such that it is unlikely that either will become major industries in the near future.⁵

Sealing. Seals were hunted very nearly to extinction in Antarctic waters and are now slowly making a comeback thanks to the protection of the Antarctic Sealing Convention. A product of the Antarctic Treaty Consultative Parties, the Convention has been a success in spite of its lack of an enforcement mechanism.⁶ Antarctic sealing, in any case, is unlikely to be of great economic importance in the near future.

Krill. The Antarctic marine resource with the greatest economic potential is the shrimplike krill. The protein-rich creatures drift in huge concentrations of up to several square miles of surface area. Since the krill generally swarm in the top 100 meters of water with the greatest concentrations in the top ten meters, no remarkable technology or skill is required to net them and scoop them into waiting vessels.⁷ A number of studies have estimated that the annual sustainable catch of krill may well be 50-200 million tonnes. Since the current annual fish catch from all other sources is about 70 million tonnes, krill might easily double the world catch of a major protein source.⁸

There are obstacles to exploiting the potential of krill though. Processing is difficult as krill do not freeze readily during conventional treatment. Their digestive enzymes are adapted to frigid waters and continue to work when subjected to normal processing temperatures.⁹ Marketing appears to be another difficulty as krill do not have a readily acceptable taste. Some work has been done using krill as an additive for animal feed,¹⁰ and since 1977, Chile has test marketed marinated krill sticks and quick-fried krill. Other products including krill sausage and bread of krill flour have been offered at



SOURCE: United Nations, General Assembly, 39th Session, 31 October 1984. Question of Antarctica: Report of the Secretary-General (A/39/583), part 1, p. 104.

FIGURE 3-1

PRINCIPAL CONCENTRATIONS OF ANTARCTIC KRILL

very competitive prices. Respondents were reportedly favorable, but no great enthusiasm seems to have been generated by the Chilean marketing effort.¹¹

In part because of processing and marketing difficulties, commercial krill fishing is not well-developed. Only the USSR and Japan have taken commercial quantities although a number of other nations have conducted exploratory fishing. The Soviet Union controls 90 percent of the Antarctic commercial fishery and took about half a million tons in 1982. By 1983, the last year for which figures are available, the total catch by all nations had fallen to 230,000 tons.¹²

The obstacles to the extraction of krill are amenable to solution with relatively simple technological advances. Commercial exploitation on a large scale--especially from the richest waters near the islands in the American quadrant--is unlikely to be far in the future.¹³ Largely in recognition of the dangers of overfishing, the Convention for the Conservation of Antarctic Marine Living Resources (the Canberra Convention) was adopted and has been in effect since 1982. The Convention is technically separate from the Antarctic Treaty although it was drafted by claimant Consultative Parties and has clauses compelling adherence to the Treaty's principles.¹⁴ It is too soon to fully evaluate the effectiveness of the Canberra Convention, although its effect to date has been positive.

Icebergs. By far the most available Antarctic resource is, not surprisingly, ice. The continent holds about three fourths of the earth's fresh water, an increasingly critical resource in most of the world.¹⁵ The most obvious method of harvesting icebergs is to use a

portion of the 1200 cubic kilometers that are estimated to calve each year from the major ice shelves. If only ten percent of the annual production could be delivered it could provide water to irrigate six to ten million hectares or satisfy the demands of an urban population of 500 million.¹⁶

The difficulty with icebergs lies in their transportation and in utilizing them once they arrive. A Saudi prince invested heavily in studies to deliver fresh water to Jiddah, but was stymied in the end by the engineering problems associated with transporting ice through equatorial waters at necessarily slow speeds. Transporting the huge, tabular ice to the West Coast of South America and Southwest Australia presents fewer technical problems. There are records of small icebergs being towed as far north as Peru late last century although what purpose they served upon arrival is unclear.¹⁷

Utilizing the freshwater payload presents considerable challenges as well. Most continental shelves have depths of about 200 meters at their outer edges while icebergs are known to have that draft and more. The melted water must then be pumped the distance to the shore by means of sea-floor piping.¹⁸ A theoretical alternative use for icebergs is the harnessing of their temperature differential with the surrounding sea water as a heat sink for the generation of energy.¹⁹

Clearly a great deal of imaginative research must be accomplished before icebergs can be utilized on any scale, but the needs and potential rewards are such that, with sufficient funding, progress might be surprisingly rapid.²⁰

Hydrocarbon Resources

The possibility of oil and natural gas deposits in the Antarctic continental shelf fueled considerable speculation in the wake of the dramatic price rises of the 1970's. Strong indications for the presence of hydrocarbon deposits were first detected by the Glomar Challenger in the 1972-73 austral summer.²¹ The US Geological Survey estimated recoverable oil reserves in the Ross, Bellingshausen, and Weddell Seas at 15 billion barrels, and Gulf Oil refined that figure in 1979 to 50 billion barrels in the Ross and Weddell Seas alone (for purposes of comparison, Alaska's North Slope contains ten billion barrels).²² Recently the West German research ship Polarstern announced that it had found unambiguous evidence of oil deposits in the Bransfield Strait off the tip of the Peninsula.²³ Other ships from the United States, Japan, Norway, Poland, Great Britain, Australia, and France have performed surveys for oil, but have been noticeably reticent about divulging their findings.²⁴

The limited survey evidence of oil and natural gas is bolstered by a body of geological evidence pointing to the existence of a deep basin with sediments three to four kilometers thick in the Weddell Sea shelf. While it is not so prime a target for exploration as the Weddell Sea, the Bellingshausen Sea is considered a likely, if secondary, hydrocarbon exploitation area.²⁵

Despite the geological attractiveness of the continental shelves of West Antarctica, the barriers to thorough exploration, not to mention extraction, are daunting. The Weddell Sea has heavy pack ice year-round which makes the usual towed sensing arrays useless. Beyond the pack ice, there is the constant danger of sea ice, some of which

can be maneuvered by icebreakers and tugs but the largest--measuring up to 70 by 100 kilometers--can only be avoided.²⁶ Icebergs are known to scour the ocean floor at up to 500 meters depth, so production wells will have to be constructed in a manner which leaves no part of the structure protruding above the sea floor.²⁷ The exceptional depth of the continental shelves, vast distances to markets and refineries, the shortness of the navigable season, and the lack of any infrastructure make the prospect of oil extraction prohibitively expensive.²⁸

Abundant supplies of relatively cheap oil in the past several years and the recent, depressed oil prices arranged by Saudi Arabia have lessened the urgency of prospecting for Antarctic oil. Paradoxically, today's low prices may eventually cause an even greater demand for Antarctic oil. In September 1985, the Worldwatch Institute disclosed an analysis which asserted that in 15 years the oil reserves of the United States, Great Britain, and Mexico will essentially be depleted. The oilfields of Western Siberia, once thought inexhaustible, have experienced declining production for several years. At the same time, the oil glut has caused a drastic curtailment of research and development for alternative power generating equipment. The implications of the exhaustion of readily available deposits and the dearth of developed alternatives may make the competition for marginal oilfields--like the Antarctic--all the fiercer.²⁹

Oil technology applicable to Antarctic conditions is being developed in other environments as a result of the stimulus of higher prices in the 1970's. The technology for drilling at great depths is

being employed near Australia (an Antarctic claimant) and sea floor installations are being planned which can operate at great depths by remote control.³⁰ Last year, in the Beaufort Sea northeast of Alaska, commercial oil was, for the first time, pumped from a well perched on shifting ice. The price of the oil extracted by such advanced technology is, at present, far higher than that of Middle Eastern oil and progress in extractive technology can be expected to be slow so long as there is a wide gap in price. Because of the long lead times involved in oil production, as the price gap narrows efforts at development will accelerate.³¹

In sum, it is possible to imagine that if one or more large Antarctic oil deposits can be proven, exploitation could occur by the end of the century, particularly if political considerations are included in the cost-benefit analysis. It is instructive to note that, although Antarctic oil is not economic now, in 1961 North Sea oil was considered a fringe project.³³

Hard Minerals

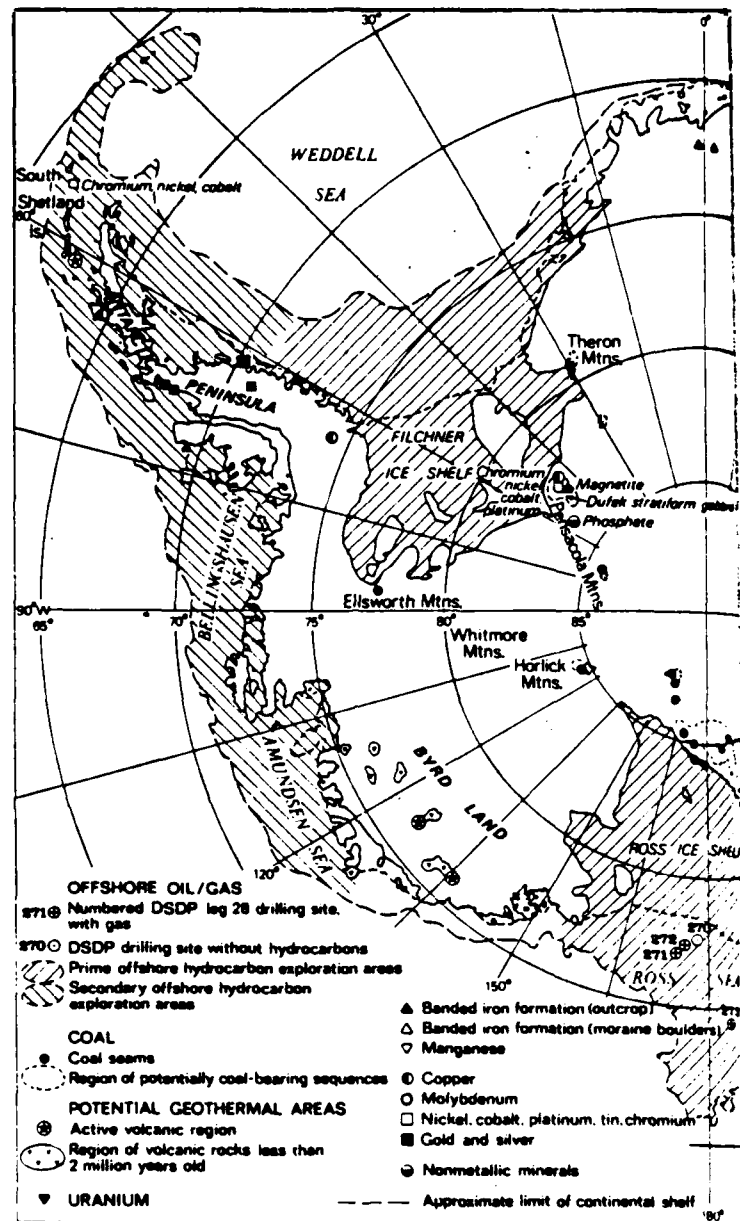
The presence of minerals in Antarctica has been suspected since what turned out to be the world's largest coal deposit was discovered in the Transantarctic Mountains in 1907.³³ Predictions about the likelihood of mineral deposits were encouraged as the theory of continental drift gained wide acceptance and the mineral wealth of once adjacent land masses of the Gondwana supercontinent were extrapolated onto Antarctica and ice-bound wealth was assumed.³⁴

In the American quadrant prospecting is oriented mainly on the Antarctic Peninsula and the Pensacola Mountains near the southern

extremity of the Weddell Sea. The generally recognized geological similarities between the Andes and the Peninsula have lent some weight to speculations that the rich copper deposits of Chile and Peru might recur in Antarctica. Indeed, deposits of porphyry copper, typical of the central Andes, have been found. Elsewhere on the Peninsula, occurrences of molybdenum, chromium, cobalt, nickel, gold, and silver have been cataloged, but the discoveries to date have been too low in grade to justify a classification higher than speculative.³⁵ While the paucity of major mineral finds in the southern Andes may reflect a similar lack in the Peninsula, the area is still regarded as a promising location for prospecting.³⁶

The Dufek Massif, which comprises the northern third of the Pensacola Mountains, is particularly attractive as a target for minerals exploration because it is an igneous stratiform complex similar to that of Sudbury in Ontario, the Bushveld in South Africa, and the Stillwater in Montana which are mined for their rich deposits of platinum, chromium, copper, and nickel.³⁷ Exploration in the area has barely begun and, although no significant metal deposits have been reported to date, the area is still considered a prime target for the exploitation of strategic minerals.³⁸

Some interest has been expressed in the manganese nodules which have been found in abundance along a belt up to 500 kilometers wide beneath the Antarctic Convergence. Indications are strong though that the richer cobalt, copper, and nickel content of ferromanganese nodules found in more hospitable equatorial portions of the Pacific will incline potential miners away from Antarctic waters.³⁹



SOURCE: J.F. Lovering and J.R.V. Prescott, Last of Lands . . . Antarctica (Melbourne: Melbourne University Press, 1979), p. 82.

FIGURE 3-2

MINERAL AND FUEL OCCURRENCES IN WEST ANTARCTICA

Any future mineral exploitation on Antarctica will share the physical difficulties of vast distances to refineries and markets, hazards to shipping, harsh conditions, and lack of infrastructure that inhibit hydrocarbon work. Additionally there are obstacles peculiar to working on the land mass. Fully 98 percent of the continent is covered by slowly moving ice sheets up to four kilometers thick. The ice not only increases the depths of the deposits but would obviously play havoc with tunneling operations. Hard rock mining is an energy intensive operation in any case and would be made all the more so by the demands of melting ice to supply the quantities of water that would be needed.⁴⁰ Mineralization is most likely to occur in the lower depths of igneous complexes like the Dufek Massif so the four mile depth of the Massif with the attendant volume of waste and slag must be considered.⁴¹ The Antarctic Peninsula is less geologically attractive than the Dufek Massif, but it has the advantages of greater accessibility and quantities of liquid water for much of the year. The Peninsula is actually an archipelago with ice filling the spaces between islands.⁴² Miners there might well find themselves below sea level before hitting rock, thus compounding the engineering problems.

The physical difficulties combined with the relatively plentiful known reserves of such minerals as might be extracted from the American quadrant make Antarctic mining an unlikely prospect for the foreseeable future. Current estimates are that each dollar's worth of refined metal obtained would cost at least ten dollars to extract.⁴³

Politically, hard mineral and hydrocarbon extraction face the difficulty that the exploitation of such nonrenewable resources is traditionally an integral part of the concept of sovereignty. The complex of political and legal questions which went into the Canberra Convention are inevitably more acute as prospecting states work toward a minerals regime for the Antarctic.⁴⁴

Since 1981, the Consultative Parties to the Antarctic Treaty have held frequent discussions on the development of a minerals regime but, since no official reports on the deliberations have been published, the extent of their progress is not certain. It is anticipated that an agreement would not be a detailed mining code, but a general institutional framework with detailed provisions deferred until discoveries warrant them.⁴⁵

Contending Positions on the Administration of Antarctica

The possibility that economic benefits might eventually be realized from the exploitation of Antarctic resources tended to harden the positions of nations with long standing interests in the region and energized nations which had heretofore expressed little inclination toward scientific endeavors in the Antarctic. Governments have generally declared positions favoring either the outright division of the continent and associated islands and waters, a policy of access based on ability to conduct and support Antarctic activities, or a division of extracted wealth among all nations regardless of actual participation.

Territorial Division

The preference of the seven nations which have staked official territorial claims in Antarctica is clearly for general recognition of their sovereignty. Under traditional international law, states could claim any land not already under the sovereignty of another state. The claimants hold that traditional rules remain legitimate and apply to Antarctica. Among the seven claims, those of Chile, Argentina, and Great Britain overlap. They consider their differences to be bilateral in nature and, in the case of Argentina and Chile at least, by no means insoluble.⁴⁶ In addition to the land territory, the claimant states maintain that their sovereignty accords them the same rights in the waters adjacent to their claims that coastal nations enjoy elsewhere.⁴⁷

The claimant states are by no means uniform in the defense of their sectors. Norway is particularly low key. It takes part in activities only occasionally and on a very small scale.⁴⁸ Prior to the Falklands War, a prominent British diplomat suggested that the United Kingdom should look upon itself as a non-claimant in all but name for resources.⁴⁹ Australia, on the other hand, is almost as intransigently territorialist as Argentina and Chile and has taken the lead in the defense of the rights of claimant states and the Treaty system in general.⁵⁰

Free Access

A number of advanced, industrialized countries favor an open door policy with access to the Antarctic for any state with sufficient

financial and technological resources to undertake the ventures. Mining camps would be under the control of the country doing the mining, much the same sort of flag state jurisdiction by which Antarctic scientific stations now operate.⁵¹

Most nations adhering to that position, including the United States and the Soviet Union, do not recognize other nations' territorial claims but reserve the right to make a claim of their own at some future time. The USSR has consistently striven to strengthen its basis for future claims by means of a chain of stations around the continent. The Soviet stations are positioned to insure participation in all national sectors and are usually located close by the most promising mineralogical prospecting sites.⁵² The United States maintains a presence in all sectors by the cunning expedient of continuously manning a station at the geographic South Pole.⁵³

Among the other industrialized nations which make no secret of their prospecting are Japan and both Germanies. Japan and West Germany are vigorously searching for oil with the objective of securing direct access to hydrocarbon reserves in the next century. East German scientific papers continually stress that they are looking for valuable resources.⁵⁴

Common Heritage

While the positions of the free access and territorial division nations are fairly predictable, a new movement has developed in recent years which further complicates the issue of the administration of Antarctica. Dissatisfaction with the exclusive nature of the Antarctic Treaty regime, and the likelihood that whether the claimants

or the free access proponents had their way, little of the economic wealth of Antarctica would accrue to Third World countries compelled some statesmen to press for broader participation in Antarctic matters.

The concept of "distributive justive" of world resources was first formulated by Maltese Ambassador Arvid Pardo in the 1967 United Nations General Assembly. The concept was generally popular among the have-nots of the world and came to be embodied in the Convention on the Law of the Sea (the Montego Bay Convention) of 1982. Seabeds, the Moon and other celestial bodies, and Antarctica came to be viewed as common spaces which ought not to be appropriated by any single state but exploited as the common heritage of mankind.⁵⁵

Antarctica was included in the discussions of the Third World largely at the instigation of Dr. Mahathir bin Mohamad, the Prime Minister of Malaysia, who eloquently compared control of Antarctica by the (then) 16 Consultative Parties as similar and as illegal as colonialism.⁵⁶ Largely through the efforts of statesmen from Malaysia as well as Antigua and Barbuda, Antarctica as the "common heritage of mankind" was included on the 1983 agendas of the Non-Aligned Summit Conference in New Delhi, the Organization of Eastern Caribbean States and the Caribbean Community and Common Market.⁵⁷

The United Nations General Assembly has dealt with the question of Antarctica each session since 1983. The first session directed the Secretary-General to prepare a report to the General Assembly and the 1984 session produced--in addition to the Secretary-General's superb report--a mild resolution acceptable to all factions.⁵⁸ The 1985 session, however, adopted three resolutions intended to undercut the

authority of the Treaty and replace it with a UN-sponsored institution.⁵⁹

Despite the militant rhetoric of the common heritage adherents there are indications that the issue is not embraced as passionately as it might seem. Antigua and Barbuda as well as Sierra Leone, acting on behalf of Caribbean and African groups, appear to have grasped the question of Antarctica primarily as a handy stick to bash South Africa.⁶⁰ The lack of serious interest was further pointed up in January 1985 when the United States offered to fly notables from 21 non-Treaty nations for talks in Antarctica. Only six accepted.⁶¹

The Consultative Parties have successfully defused much of the momentum behind the Third World drive to replace the Treaty regime for Antarctica. With the elevation of Brazil and India (1983) and China (1985) to Consultative Party status three quarters of the world's population and all five permanent members of the Security Council are represented by the Treaty.⁶² The Consultative Parties have been effective in pointing out their positive role in demilitarizing the Antarctic and in preventing the catastrophic environmental damages of too rapid development.⁶³

World Park

Perhaps as a result of their concern for the great whales, environmental protection groups have taken an interest in Antarctica.⁶⁴ The Friends of the Earth organization has proposed that all the land and seas south of the Antarctic Convergence should become a "natural wilderness area and world heritage." The group would

totally ban development and rigorously limit access to the region.⁶⁵

The Greenpeace organization took up the standard and, with considerable publicity, announced an expedition with a wintering-over party that was to enter Antarctic waters at the Ross Sea on the first of February 1986. Their objectives were to expose the "seamy" goings on at the US McMurdo base, establish the continent's first non-government sponsored station, and declare the Antarctic a world park.⁶⁶ Oddly for an organization which relies heavily on publicity to further its objectives, little has been carried by the popular media about the Greenpeace Antarctic party since January.

The notion of preserving the entire Antarctic as a world park has been popular in certain liberal circles of many English-speaking nations, but it is probably unrealistic to hope that the entire region south of the Antarctic Convergence will be immune in perpetuity from any kind of development. Perhaps the best hope for those favoring an Antarctic world park is for technological advances to make krill and the potential mineral resources irrelevant. Biotechnology may provide new sources of protein and materials substitution may radically alter the importance of petroleum and hard minerals.⁶⁷

Summary

In sum, commercial exploitation of certain Antarctic resources is rapidly becoming technologically feasible. Fishing is already underway in Antarctic waters and oil and mineral prospecting has revealed strong indications of deposits on or near the continent. The

potential wealth of the Antarctic has heightened interest among nations with an aim to share in any future economic benefits. It is unclear whether the territorial division, free access, and common heritage of mankind positions can be amicably reconciled before extractive technology is poised to exploit Antarctica in earnest.

Notes

¹Philip W. Quigg, Antarctica: The Continuing Experiment, Headline Series no. 273 (New York: Foreign Policy Assoc., 1985), p. 3.

²Ibid., p. 8.

³The Southern Ocean is a nonstandard geographic expression applied to the southernmost waters of the Atlantic, Pacific, and Indian oceans notes James H. Zumberge, "Mineral Resources and Geopolitics in Antarctica," American Scientist 67 (January-February 1979):70.

⁴George A. Knox, "The Living Resources of the Southern Ocean," in Antarctic Resources Policy: Scientific, Legal, and Political Issues, ed. Francisco Orrego Vicuna (Cambridge: Cambridge University Press, 1983), pp. 34-6.

⁵J.F. Lovering and J.R.V. Prescott, Last of Lands . . . Antarctica (Melbourne: Melbourne University Press, 1979), p. 195.

⁶F.M. Auburn, Antarctic Law and Politics (Bloomington: Indiana University Press, 1982), pp. 210-1.

⁷Knox, p. 30; M.J. Peterson, "The Last Great Land Rush on Earth," International Organization 34 (Summer 1980):383, points out that 61.5 percent protein krill is as rich a food source as lobster, shrimp, and beef. United Nations, General Assembly, 39th Session, 31 October 1984, Question of Antarctica: Report of the Secretary-General (A/39/583), part I, p. 58, notes that catches of 35 tonnes in eight minutes and 139 to 292 tonnes per day have been reported.

⁸"Antarctic Research on Krill," Australian Foreign Affairs Record 55 (September 1984):910-1.

⁹Barbara Mitchell, "Cracks in the Ice," Wilson Quarterly 4 (Autumn 1981):80.

¹⁰Keith D. Suter, "The Antarctic: A Crisis for the 1980's?" Journal of the Royal United Services Institute for Defense Studies 126 (March 1981):41.

¹¹Lee Kimball, "La carrera por la pesca antártica está en marcha," in Geopolítica y política de poder en el Atlántico Sur, ed. Carlos J. Moneta (Buenos Aires: Editorial Pleamar, 1983), pp. 206-7.

¹²United Nations, General Assembly, Question of Antarctica, p. 58; Quigg, Continuing Experiment, pp. 28-9; Robert Fox, Antarctica and the South Atlantic (London: British Broadcasting Corp. Publications, 1985), p. 170.

¹³Lovering, p. 195.

¹⁴Fred Parkinson, "Latin America and Antarctica: An Exclusive Club," Journal of Latin American Studies 17 (November 1985):439.

¹⁵Quigg, Continuing Experiment, p. 35.

¹⁶Lovering, p. 56.

¹⁷Philip W. Quigg, A Pole Apart: The Emerging Issue of Antarctica (New York: McGraw-Hill Book Co., 1983), p. 104. Because of the prevailing west to east currents the most suitable source of icebergs for the Atacama is the Ross Ice Shelf in the Australian quadrant notes Lovering, p. 59. The issue of sovereignty over ice originating in one claim and used by another claimant has mercifully not yet become a matter of speculation in the available literature.

¹⁸Lovering, p. 196.

¹⁹United Nations, General Assembly, Question of Antarctica, p. 63.

²⁰Lovering, pp. 196-7, discusses the utilization of icebergs in some detail and notes that it is not unreasonable to predict ice delivered to Perth within the coming decade.

²¹While exploring in the Ross Sea the Glomar Challenger detected methane, ethane, and ethylene. The ship avoided drilling in the most likely oil sites for fear of a blowout which it was not equipped to control notes Mitchell, p. 76.

²²Evan Luard, "Who Owns the Antarctic?" Foreign Affairs 62 (Summer 1984):1182.

²³Quigg, Continuing Experiment, p. 31.

²⁴Fox, p. 75; Luard, p. 1182.

²⁵Lovering, pp. 93-6.

²⁶Zumberge, p. 74.

²⁷Ibid.; Michael Morgan, "Antarctica: Awaiting the Competition," Defense and Foreign Affairs Digest no. 7 (1979):34.

²⁸Quigg, Continuing Experiment, pp. 31-3.

²⁹Malcolm W. Browne, "New Energy Ideas Emerge as Oil Reserves Dwindle," New York Times, 31 December 1985, p. 11; Philip Taubman, "Oil's Decline Seen Curbing Soviet Plans," New York Times, 10 March 1986, p. 34.

³⁰Lovering, p. 199.

³¹Douglas Martin, "Has Canada Lost Its Oil Gamble?" New York Times, 9 February 1986, sec. F, p. 4, reports that the cost of extracting Saudi oil is two dollars per barrel. Oil from the Beaufort Sea platforms came in at thirty times as much.

³²Quigg, Pole Apart, p. 98; Suter, p. 41.

³³Mitchell, p. 77.

³⁴Lovering, pp. 75-9.

³⁵Zumberge, pp. 71-2; United Nations, General Assembly, Question of Antarctica, pp. 93-4.

³⁶Lovering, p. 85.

³⁷Zumberge, p. 71; David Sugden, Arctic and Antarctic: A Modern Geographical Synthesis (Oxford: Basil Blackwell Publisher, Ltd., 1982), p. 393.

³⁸United Nations, General Assembly, Question of Antarctica, p. 94.

³⁹Ibid., p. 100; Zumberge, p. 74.

⁴⁰Quigg, Continuing Experiment, p. 33; Lovering, p. 197.

⁴¹Zumberge, p. 71.

⁴²The entire continent would actually slowly rise about 600 meters if the weight of the ice mass were removed. At the same time, the sea level would rise 60 meters asserts Lovering, pp. 6-7.

⁴³Quigg, Continuing Experiment, p. 33.

⁴⁴"Australia and the Antarctic Treaty System," Australian Foreign Affairs Record 55 (February 1984):95.

⁴⁵United Nations, General Assembly, Question of Antarctica, p. 71; "Progress Made toward Antarctic Agreement," Financial Times, 13 March 1985, in Information Services on Latin America 30 (March 1985):429. The discussions were held in New Zealand (June 1982 and January 1983), West Germany (July 1983), United States (January 1984), Japan (May 1984), Brazil (February 1985), and France (September 1985).

⁴⁶Peterson, p. 391.

⁴⁷"Australia and the Antarctic Treaty System," p. 92.

⁴⁸Quigg, Continuing Experiment, p. 50.

⁴⁹Auburn, Antarctic Law and Politics, p. 60.

⁵⁰Mitchell, p. 82; Peter J. Beck, "Antarctica: A Case for the UN?" World Today 40 (April 1984):170-1. Jorge A. Fraga, Introducción a la geopolítica antártica (Buenos Aires: Dirección Nacional Antártica, 1979), p. 17, points out that it is a point of no little irritation to the Southern Cone claimants that the four nations with uncontested claims all recognize the British claim over those of Argentina and Chile. That should come as no surprise though as the others' claims are based on much the same legal ground as the UK's and the Australian and New Zealand claims were British before being transferred to the former colonies notes United Nations, General Assembly, Question of Antarctica, p. 38.

⁵¹Kurt M. Shusterich, "The Antarctic Treaty System: History, Substance, and Speculation," International Journal 39 (Autumn 1984): 815-6.

⁵²Boleslaw A. Boczek, "The Soviet Union and the Antarctic Regime," American Journal of International Law 78 (October 1984):843. Druzhaya Station was established shortly after the identification of the nature of the Dufek Massif. Fifty men there have the principal mission of looking for minerals. From that point on the Flichner Ice Shelf the station is also useful for supporting oil exploration in the Weddell Sea reports F.M. Auburn, "Gas y petroleo frente a la costa ("Off-Shore") en la Antártida," in Geopolítica y política de poder en el Atlántico Sur, ed. Carlos J. Moneta (Buenos Aires: Editorial Pleamar, 1983), p. 166.

⁵³Auburn, Antarctic Law and Politics, p. 63.

⁵⁴Fox, p. 174; David S. Salisbury, "Antarctica: Geopolitical Football," Technology Review 79 (March-April 1977):14. As indicated earlier, neither Germany is interested in reviving the claims laid by the Schwabenland. Japan renounced any claim to Antarctica by the terms of the September 1951 Treaty of Peace notes United Nations, General Assembly, Question of Antarctica, p. 17.

⁵⁵Parkinson, p. 437.

⁵⁶Luard, p. 1183.

⁵⁷Beck, "Case for the UN?" p. 166. There are strong indications that the resolution on Antarctica from the important New Delhi meeting was diluted by Argentine efforts suggests Peter J. Beck, "The United Nations and Antarctica," Polar Record 22 (May 1984):139.

⁵⁸Peter J. Beck, "The United Nations' Study on Antarctica, 1984," Polar Record 22 (May 1985):502.

⁵⁹Elaine Sciolino, "Antarctic Treaty Nations Threaten to Boycott UN Debates," New York Times, 4 December 1985, p. 2, reports that the resolutions called for 1) International management and equitable sharing of the benefits of Antarctic minerals, 2) Expulsion of South Africa from the Treaty organization, and 3) Expansion of the UN study.

⁶⁰Beck, "Case for the UN?" pp. 170-1. South Africa is one of the original Consultative Parties, but it is not a claimant to any part of the continent. South Africa has claimed the Prince Edward Islands without apparent opposition since 1948. The volcanic islands are considered sub-antarctic as they are at 46° South and slightly outside the Antarctic Convergence explains Fraga, p. 17; Lovering, p. 45.

⁶¹Quigg, Continuing Experiment, p. 43.

⁶²Ibid., p. 47; "Antarctic Treaty: Australian Statements to the UN General Assembly," Australian Foreign Affairs Record 55 (November 1984):1228.

⁶³"The Value of the Antarctic Treaty System," Australian Foreign Affairs Record 55 (September 1984):907.

⁶⁴Quigg, Continuing Experiment, p. 44.

⁶⁵Lovering, p. 195.

⁶⁶Peter O'Loughlin, "Greenpeace Wants to Make Antarctica a Global Park," Gainesville (Florida) Sun, 8 November 1985, sec. C, p. 5; Walter Sullivan, "Greenpeace Sending Team to Antarctica," New York Times, 3 December 1985, p. 17; "Greenpeace Announces Bid to Make Antarctica a Park," New York Times, 30 January 1986, p. 4.

⁶⁷Quigg, Continuing Experiment, pp. 38, 45.

CHAPTER 4 ANTARCTICA AND THE SOUTHERN CONE

Geopolitics as a framework of analysis for international relations has been particularly influential in the nations of the Southern Cone. While Geopolitik as a discipline became a pariah among social sciences of the Western Allies after World War Two, in the Southern Cone the study of geopolitics continued in the nations' military schools. Prolific and influential writings from Argentina, Brazil, and Chile abound and may provide insight into the perceptions of many leaders of the region.¹

Antarctica in Southern Cone Geopolitics

Although geopolitics among Southern Cone nations has traditionally focused upon unresolved boundary disputes, historical territorial claims, and territorial vindication, the Antarctic, as unoccupied but claimable territory, has become an important target of current geopolitical thinking. A review of Southern Cone geopolitical tenets with emphasis on Antarctica's position is therefore appropriate.

Argentina

Tenets of Argentine geopolitics. Argentine geopolitical thought draws heavily from the works of Karl Haushofer and other pre-World War

Two German thinkers. Consequently, important foci of Argentine geopolitical thinking are concern over Brazilian expansionism as a threat to Argentina's natural role as leader of the Southern Cone, maritime dominance of the Southwest Atlantic, recuperation of the Falklands, protection of the Antarctic claims, and concern over the lack of national unity of purpose and its effect on Argentine national development and international relations.²

The continental concern of Argentine geopolitics hinges on its perception of Brazilian expansionism into the River Plate basin in combination with a transcontinental thrust by Brazil through thinly populated portions of Bolivia and Peru to obtain access to the Pacific. If the Argentine fears were to become reality, Uruguay, Paraguay, and Bolivia would be removed from Buenos Aires' sphere of influence and the traditional alliance with Peru would be weakened. Such an adverse scenario would require not only Brazilian initiatives but the connivance of Chile--Argentina's other Southern Cone rival.³

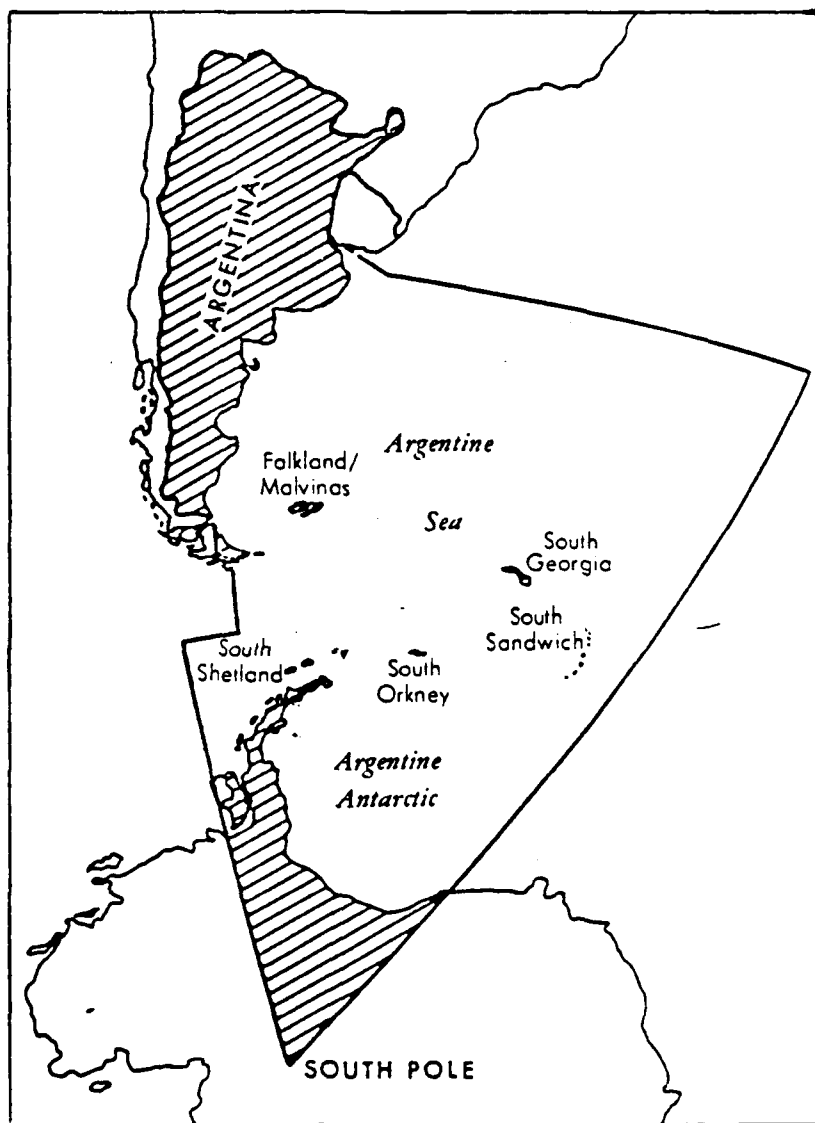
The maritime aspect is probably more important than the continental in Argentine geostrategy. Control of the South Atlantic is seen as a vital interest, but one which is frustrated not only by British control of the Falklands, South Georgia, and South Sandwich Islands, but by Brazil's interest in the Cape of Good Hope shipping lanes and perceptions of Chilean expansionist tendencies east and north of Tierra del Fuego.⁴ As early as 1916, Argentine strategists advocated control of key points in the South Atlantic to protect the territorial integrity of continental Argentina.⁵ Since World War Two, the relatively modest Argentine Sea proposals of Admiral Storni have been elaborated and expanded. General Juan E. Guglielmelli, editor of

the influential geopolitical journal Estrategia, declared that complete sovereignty over the disputed islands of the South Atlantic as well as the coast of the Argentine Antarctic is a national imperative. Semi-officially, an Argentine Sea has been declared over the area shown in Figure 4-1 although some strategists would occupy British-held Gough Island midway between Buenos Aires and Cape Town as well in order to deny it to Brazil.⁵

Officially, Argentina claims sovereignty over the seas adjacent to its coast--including disputed territories--to a distance of 200 nautical miles.⁷ The idea behind the Territorial Sea is to incorporate the Mar Argentino or "Wet Pampa" to the country just as the Humid Pampa and Dry Pampa were during the last century.⁸

The ambitious objective of integrating the South Atlantic with mainland Argentina is most thoroughly explored by Admiral Fernando Milia in his concept of La Atlantártida. His geopolitical construct integrates the South Atlantic coasts of South America, Africa, and Antarctica and creates a vast area of opportunity for Argentina. The South Atlantic basin is regarded as the "New Grand Argentine Frontier" and will be the theater for exercising Argentine power in the coming decades. Admiral Milia advocates an increased Argentine diplomatic activity, commercial utilization, and military presence to enhance the domination of that strategic area before other nations rush in and deprive Argentina of its Mare Nostrum.⁹

Argentine domination of the entire South Atlantic basin seems extremely ambitious, if not fanciful, in light of historical domestic uncertainties and the fact that much of the key strategic space



SOURCE: Jack Child, Geopolitics and Conflict in South America: Quarrels among Neighbors (New York: Praeger Publishers, 1985), p. 129.

FIGURE 4-1
THE ARGENTINE SEA

which it encompasses is decisively in British hands or remains demilitarized, for now, by the Antarctic Treaty.¹⁰

Antarctica in Argentine geopolitics. The Argentine Antarctic is an important component of the destiny which some nationalists envision unfolding in the coming decades. The geopolitical value accorded Antarctica by Argentine geopoliticians revolves primarily around its strategic location and its future economic benefits. The geographic location of their claimed Antarctic quadrant is considered important both because of the control that the Peninsula and its associated islands command over the Drake Passage, and because it lies across potentially important transpolar communications routes.

Argentine geostrategists identify the Drake Passage as one of the three keys to the South Atlantic which is, in their assessment, a major route for raw materials and naval forces traversing the Southern Ocean. The value of the Drake Passage is particularly crucial in view of the vulnerability of the Panama and Suez Canals which are, in any case, already unsuitable for submarines and for larger warships and oil tankers.¹¹ The prerogative to deny transit through the strategic choke point between the South Pacific and South Atlantic would give Argentina an important role in world maritime strategy.

Sovereignty over a large slice of the continent of Antarctica would grant the owner a key position in transpolar air routes as well as circumpolar sea communications. While it is not entirely clear why the South Polar air routes would approach the northern ones in importance any time soon, Argentine geopoliticians point out that the southern routes are the most efficient and rapid means of communication between South America and the orient and for that reason

are strategic factors of prime importance to control either the Rimland of Spykman or MacKinder's World Island concept.¹²

The key position that Argentina would enjoy by virtue of controlling much of the communications in the Southern Hemisphere is enhanced by the wealth of natural resources which are anticipated from the Antarctic region. The landmass, as well as the 200 nautical mile offshore sovereignty zone claimed by Argentina, are expected to eventually yield quantities of oil, hard minerals, and food in the form of finfish and krill. The Argentine claim includes the greater portion of the relatively temperate Peninsula, the rich krill fishing grounds off the Peninsula, the South Orkney, the South Sandwich, and the South Georgia Islands, the potentially oil rich Weddell Sea, and the Dufek Massif which is presumed to contain a good deal of hard minerals.¹³ Even if Argentina's government should decide not to exploit the wealth on its own, it would control access to the producing areas by its network of Antarctic bases.¹⁴

Argentine geostrategists believe that the integration of the Argentine Antarctic, as well as the associated islands and seas, with mainland Argentina would confer both the power of key strategic location and of vast, potentially exploitable natural resources to the Republic and make it a world power of primary significance.¹⁵

Tenets of Chilean geopolitics. Chile's geopolitical school is as developed as that of Argentina and draws much of its inspiration from similar sources. Ratzel and Haushofer contributed much to the Chilean concepts of the state as a living organism with its vital heartland, the need for occupation of the available hinterland, national unity of purpose, and the other key tenets of classical European geopolitical

thought.¹⁶ Chile's demanding geography is thought to have produced a national character of discipline and hard work and a people who prefer dignified solitude to entangling alliances and compromises.¹⁷

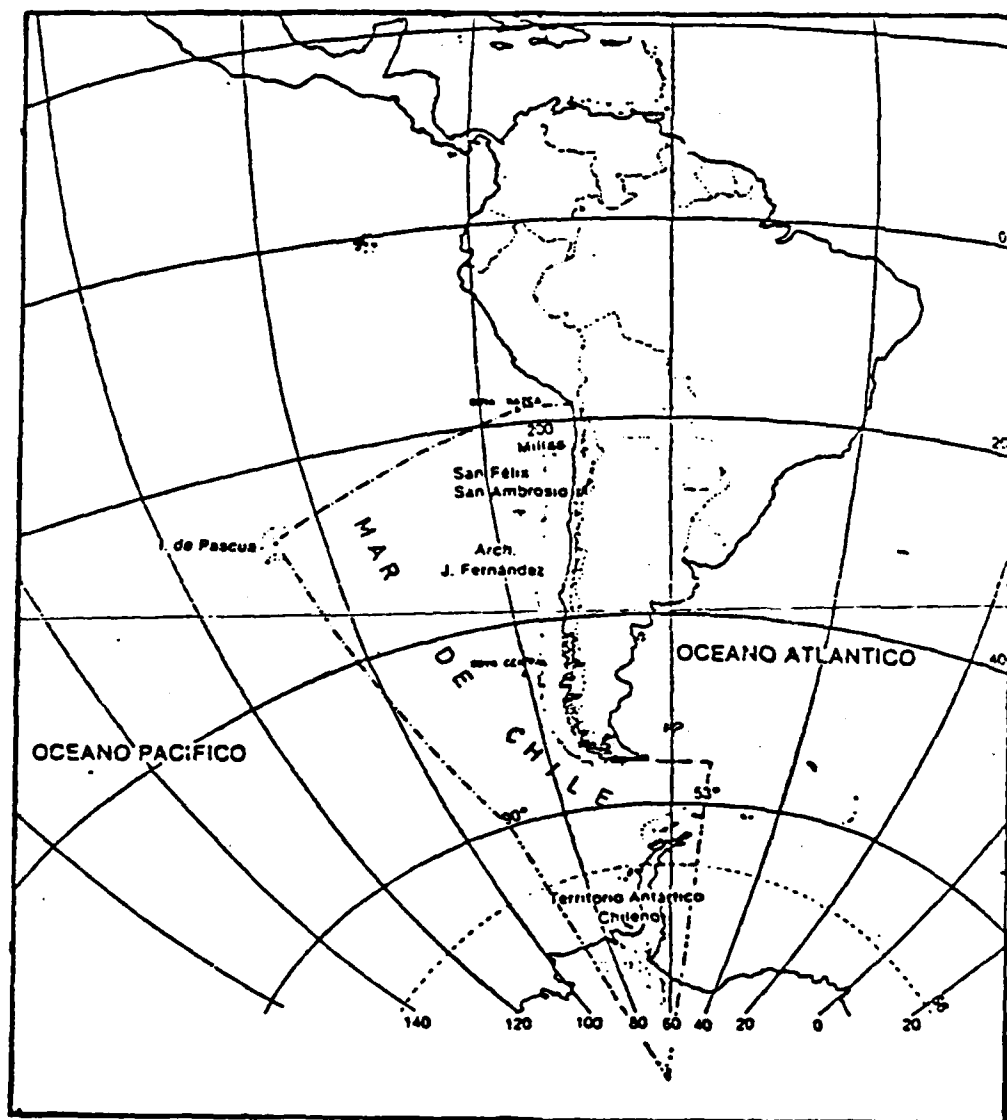
Although Chilean geopolitical strategy has a land-oriented component born out of the consideration that Peru and Bolivia might possibly try to regain lost provinces, the maritime aspect is currently more heavily emphasized. Geopoliticians generally hew to the concepts of General Cañas Montalva, an active duty Army officer in the 1940's and 50's, who envisions a great potential for Chile as a major power in the Pacific. According to Cañas Montalva, Chile's geopolitical characteristics are threefold. First, as the southernmost country in the world Chile has a natural continuity into the Antarctic. Secondly, as the world center of gravity inexorably shifts from the Atlantic to the Pacific basin, Chile is in a position to become a major Pacific power on the strength of its lengthy coastline facing the new power center. Third, Chile traditionally exercises sovereignty over the interoceanic communications routes at the southern tip of South America.¹⁸

Chile envisions itself a tricontinental power much as does Argentina. Argentina's tricontinental perceptions embrace the southeastern part of South America, Antarctica, and the various strategic island groups around the Scotia Sea. Chile's perceptions mirror Argentina's and include its South American coast, Antarctica, and its island possessions in Polynesia.¹⁹ Easter Island, by Chilean reckoning, is in a position to dominate the South Pacific much the same way that Hawaii dominates the North Pacific. The southeastern quadrant of the vast Pacific basin is seen as currently somewhat of a

backwater as the majority of world maritime traffic is in the Northern Pacific. The other three quadrants though are dominated by the United States, Soviet Union, and China while the quadrant adjacent to Chile is a power vacuum which Chile is bound to fill.²⁰

Pursuant to its perceived responsibilities in the Southeastern Pacific, a Mar Chileno has been proposed which would include the seas bounded by their tricontinental concept (see Figure 4-2). Chilean national maritime policy defines the Chilean Sea but no official claim to the waters beyond 200 nautical miles is in effect.²¹ Writers for the official Chilean Geopolitical Institute point out that in recent decades territorial waters have expanded from 3 miles to the current 200 nautical mile sovereignty. They speculate that territorial waters could extend to 300 nautical miles or even that the world's oceans might be entirely divided up in a manner similar to the division of land territory during the seventeenth to nineteenth centuries.²² The concepts of sovereignty over territorial seas espoused by Chile are similar to those of Argentina. Submarine areas are considered part of the national dominion and a prolongation of national territory beneath the sea equivalent in value to dry land.²³

Antarctica in Chilean geopolitics. Antarctica is an important component of Chile's geopolitical space also. At over 4300 kilometers in length, the Pacific coastline of the Chilean Antarctic handily augments the 8300 kilometer coastline of metropolitan Chile and expands the surface area of the potential territorial sea.²⁴ The Chilean Antarctic is also a strategic location, a potential resource deposit on a grand scale, and a psychological frontier for the Chilean nation. Strategically, some geopoliticians have described the South



SOURCE: Martin Ira Glassner, "The View from the Near North: South Americans View Antarctica and the Southern Ocean Geopolitically," Political Geography Quarterly 4 (October 1985):334.

FIGURE 4-2

THE CHILEAN SEA

Pacific, western South America, and Antarctica as a unitary system. Whoever dominates the South Pacific will control Antarctica and the contiguous portions of South America. Similarly, the power that dominates Antarctica will control the South Pacific as hegemony over one must inevitably lead to the domination of the other.²⁵ By that line of reasoning, if the Chilean sector should pass to another power the Chilean mainland must lose its independence.

Chilean strategists share the Argentine appreciation of the importance of the Drake Passage as a chokepoint for international maritime traffic, but are not so committed to the bi-oceanic principle. It is held that, while Argentina is excluded by the Treaty of 1881 from the Pacific, no such prohibition prevents Chile from extending to the Atlantic.²⁶ Any hint of Chilean pretentions toward the Atlantic is sure to elicit outraged responses from Argentines afraid of some Chilean flanking effort to usurp the South Atlantic islands and a large portion of Patagonia.²⁷

Consideration of Antarctica as a psychological frontier has much to do with the "national living organism" principles of geopolitics. In that vein, the austral regions are not only a sparsely inhabited area which a vigorous people must occupy before another does, but a means by which the unique qualities of the Chilean people can be focused on their national destiny.²⁸ The Chilean Antarctic is an extension of the historic mission of integrating the southern frontiers into the heartland of Central Chile which was mentioned in the second chapter.

Chilean policy makers--as the Argentines--clearly consider the Chilean Antarctic to be a wealth of natural resources. The Chilean

claim does not include the richest krill fishing waters or the Dufek Massif, but it does contain the entire Peninsula with its suspected mineral riches and the potentially oil rich Bellingshausen Sea. Antarctic ice harvesting also has some attraction for planners interested in irrigating the Atacama Desert.²⁹ While the Chilean Antarctic might not be quite so resource-laden in absolute terms as Argentina's claim, Chile's relative poverty in hydrocarbon and food production might make the resources relatively more valuable. Oscar Pinochet de la Barra acknowledges that one of the main objectives of his country is to exploit the Antarctic for oil as soon as practicable.³⁰

Access is an important part of Chilean geopolitical thought as it applies to Antarctica. Chilean strategists contend that Easter Island controls access to the Southeast Pacific and the Antarctic Peninsula--with the South Shetland Islands--controls transit of the Drake Passage choke point. The Peninsula in Chilean (or Argentine) hands is compared to the steppes of Eurasia as the key corridor of access to the heart of a continent. Domination of the Peninsula is viewed as tantamount to hegemony over the greater part of Antarctica.³¹

Brazil

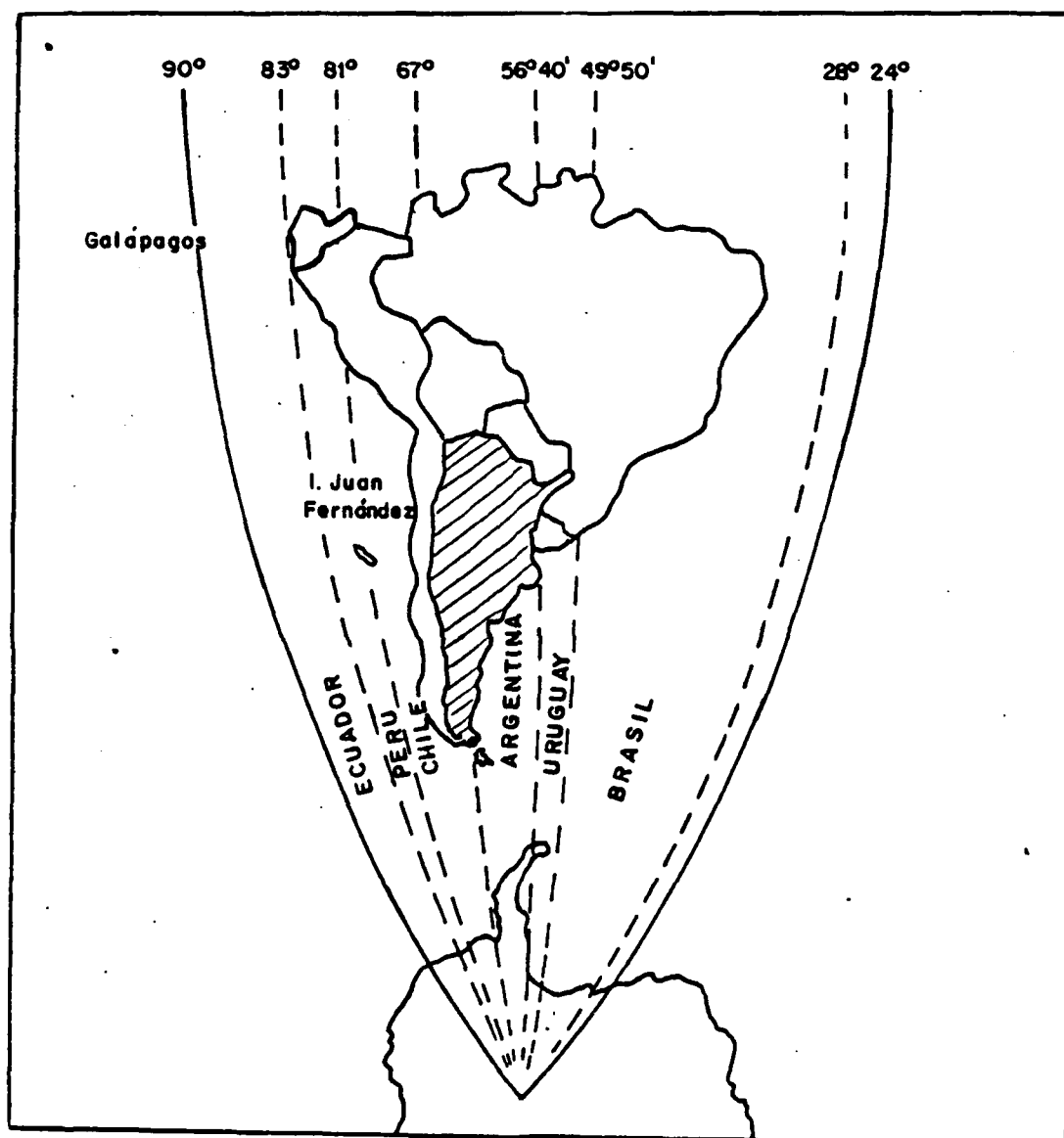
Brazilian geopolitical thought has traditionally been oriented toward the interior of the continent along two east-west axes: one through the Amazon basin and the other oriented on the "magic triangle" formed by the Bolivian cities of Cochabamba, Sucre, and Santa Cruz.³² In the late 1960's naval interests became more prominent in Brazilian geopolitical thinking although Brazil's oceanic

aspirations remain less contentious than those of Chile and Argentina.³³ The naval imperatives of Brazilian geopolitics have been outlined by General Carlos de Meira Mattos as being the sea lanes of West Africa, the Belém-Recife-Dakar axis, the Cape of Good Hope sea route, and the Tierra del Fuego choke points. He goes on to charge Brazil--in alliance with the United States--with the responsibility of assuring passage through the vital sea lanes.³⁴

Antarctica fits into the larger Brazilian geopolitical concept because of the Peninsula's key location at the Drake Passage and for the continent's potential as a base for long range missiles. Antarctica is mentioned by General Golbery do Couto e Silva as part of the decisive frontier of the world's security, that is, the triangle formed by Africa, South America, and Antarctica.³⁵

Brazil has made no territorial claim to Antarctica, and, because it is a Consultative Party to the Antarctic Treaty, Brazil cannot make one so long as the Treaty is in effect. Still, a Brazilian manifest destiny in Antarctica is sometimes advanced. The geographer Therezinha de Castro proposed a territorial division under the defrontação concept (Figure 4-3) which would allot generous slices of the continent to Uruguay, Peru, and Ecuador as well, at the expense of Argentina, Chile, and Great Britain.³⁶

Uruguay has expressed a greater interest in Antarctica than might be expected. Since the 1973 treaty delimiting Uruguay's boundary with Argentina, Uruguay has been able to speak of a "living maritime frontier."³⁷ Uruguayan geopolitical strategists agree with their Southern Cone counterparts that Antarctica and the South Atlantic are important theaters in the defense against Soviet expansion although



SOURCE: Jorge A. Fraga, Introducción a la geopolítica antártica (Buenos Aires: Dirección Nacional del Antártico, 1979), p. 36.

FIGURE 4-3

BRAZIL'S THESIS OF DEFRONTAÇÃO

Uruguay's specific role is unclear. They generally accept the thesis of defrontação as it would give them the South Orkney group but also indicate an interest in sharing in a greater South American Sector.³⁸

Antarctica figures prominently in the geostrategy of Argentina and Chile and to a lesser extent in the geopolitical concepts of Brazil and Uruguay. The geopolitical value attributed to Antarctica is related mainly to the key geographic position of the Antarctic Peninsula at the Drake Passage and to the potential wealth of resources to be exploited from the territorial claims. Control of access to the Drake Passage choke point and economic benefits are held to be major components of the geopolitical prominence of Argentina and Chile in the coming decades.

Continuity in Antarctic Policy

The 1970's and early 1980's was a period of heightened international tensions in South America. There was saber rattling between Peru and Chile, also between Chile and Argentina over the Beagle Channel Islands, and, of course, the Falkland Islands War of 1982. Those events and others inspired a number of North American scholars to produce analyses of the nature of intraregional conflict in South America. At the same time, there was a resurgence of geopolitical, legal, and ideological justifications for redress of old grievances published by South American authors.

With the redemocratization of most of the regional actors, there is good reason to question whether the identification of Antarctica as geopolitical key terrain was a symptom of the virulent nationalism

generated by the national security state or just a somewhat strident articulation of a widely accepted national interest. If Antarctica was simply an obsession of the various national military geostrategists, then the issue would have been defused by the inauguration of democratic regimes. If instead Antarctica is demonstrably an issue transcending changes of regime, then national Antarctic objectives are still quite alive and, although less vocally pressed, still strongly held. It is therefore necessary to review the historical policies of Southern Cone nations toward Antarctica.

Argentina

Argentina's commitment to Antarctica has been consistent and unyielding on the question of sovereignty and, while new initiatives to increase the Argentine presence have tended to develop during more nationalistic administrations, Radical presidents have not conspicuously reduced their nation's profile in the region. The Laurie Island station in the South Orkneys has been continuously occupied by Argentines since 1904. Of the other seven year-round bases, three were established during the first Perón administration, two in the conservative years immediately preceding Perón's return, and two during the recent juntas.³⁹ All of the bases have been continuously occupied since their establishment in spite of the onerous costs involved in their logistical support.

In addition to Antarctic bases, many other acts asserting Argentine primacy in their sector were undertaken by administrations of various political stripes. A National Antarctic Commission was established and the Argentine sector was defined and claimed during

the administration of Ramón Castillo (1942-43). President Juan Perón presided over military and naval maneuvers, administrative acts intended to bolster Argentine claims to effective occupation, and a generally bellicose anti-British posture in the disputed area.⁴⁰ Presidents Lastiri and Isabel Perón made official visits to their Antarctic Territory.⁴¹ The juntas subsequent to Isabel Perón expanded the Argentine presence by performing marriages, arranging births of Argentine babies, burying their dead, and other activities that would tend to support the Argentine contention that they are truly colonizing their own frontier.⁴² For decades an assertive, nationalistic Antarctic policy has been pursued. Whatever the regime orientation, no hint of abandoning the territorial claim has emerged from any administration or any significant opposition party.

The Falklands War. Much speculation has been made of the Falklands War as the "First North-South War of modern times"⁴³ and its connection with the nearby overlapping Antarctic claims. The evidence is strong that Antarctica figured prominently, if sub rosa, in the Galtieri junta's calculations. The Falklands, the Argentine Antarctic, and all of the island groups along the connecting submarine cordillera are part of the same Argentine administrative entity. While Great Britain formed the British Antarctic Territory as an entity distinct from the Falklands just after ratifying the Antarctic Treaty to separate the fate of the BAT from any Falklands settlement,⁴⁴ Argentina does not accept the distinction. Possession of South Georgia and the South Sandwich Islands especially--parts of the Falkland Islands Dependency--would have bolstered Argentina's claim to Antarctica under the sector concept. Significantly, the

first act of the war was the seizure of a British scientific base on South Georgia and the last act was the removal of an Argentine outpost that had been tolerated in the South Sandwich Islands since at least 1976.⁴⁵ In any case, without the Falkland Islands Great Britain would be entirely cut off from the BAT and its claim made untenable.⁴⁶

The Alfonsín administration. While Argentina's historical commitment to its Antarctic claim has persisted for over eight decades, the question of that continuity under President Raúl Alfonsín must be examined. Upon taking office he said, "Our undeniable object is, and always will be, the regaining of the islands and the definitive confirmation of the right of our nation to its sovereign territory."⁴⁷ During a trip to Spain and France in July of 1984 he plainly stated that the claim to the Falklands was part of the claim to South Georgia, the islands of the Scotia Sea, and Antarctica.⁴⁸ To be sure, President Alfonsín has been much more preoccupied with pressing economic problems than with nationalistic adventurism in the far South, but he has confirmed Argentina's long term Antarctic interest by his statements and by his continuing support of eight Antarctic bases. Nothing may result from his recently announced plan to shift the nation's capital 1000 kilometers south to the mouth of the Rio Negro, but it does indicate a significant new southward orientation which may extend to Antarctica.⁴⁹

Chile

A history of interest. Chile's interest in the Antarctic is traced to letters by Bernardo O'Higgins and figured in the policies of Diego Portales.⁵⁰ Recently, presidents have also demonstrated a

strong geopolitical orientation. President Aguirre Cerda, a Radical, first claimed the Chilean Antarctic in 1940. President González Videla, also a Radical, personally inaugurated a base in the Antarctic in 1946 and is identified with the territorial sea declaration. President Frei, a Christian Democrat, also visited Antarctica and is sometimes referred to as "the geopolitician of continental integration." The most geographically oriented president, of course, is General Pinochet who is a former professor of the subject of the Chilean Military Academy and is well known for using geopolitical analysis to arrive at government policy.⁵¹ Although the abbreviated presidency of Salvador Allende was not conspicuously geopolitically oriented and had no notable Antarctic policy, an active interest in the Chilean Antarctic is clearly visible from Radical Party presidents of the Popular Front through the Christian Democrats to the Pinochet administration.

The Beagle Channel controversy. The Beagle Channel Islands dispute between Chile and Argentina was very much related to their conflicting Antarctic claims. Despite much of the posturing, the dispute was not over the three islands but actually over maritime space. The Chilean position was for a delimitation of its territorial sea along a line extending due east from the mouth of the channel. The Argentines held for a north-south sea boundary. The seas in dispute were some 30,000 square nautical miles if the 200 nautical mile limit is accepted.⁵² Aside from the economic loss of the 200 mile zone and fears of encirclement by a Brazil-Chile axis, Argentine policy makers were most concerned that the eastward extension of the

Mar Chileno would have cut Argentina off from its Antarctic claim and put them at a disadvantage in future Antarctic talks.⁵³

Settlement of the Beagle Channel dispute was a priority for President Alfonsín and in early 1985 a settlement was ratified by both parties. In essence, Chile retains the islands and a small sea area to the east. Argentina receives a clear title to the larger portion of the maritime zone. Neither side was completely satisfied, but neither abandoned its geopolitical goals and the issue is probably over as no one has anything to gain by resurrecting the dispute. Argentina kept its access to Antarctica and the settlement is explicit that it does not affect the parties' sovereignty in the Antarctic.⁵⁴

Conclusions. There are no guarantees that future Chilean presidents will continue the geopolitical orientation of their predecessors. Over time, though, Chilean leaders have followed geopolitical goals in spite of changes in style and ideology and, if the past is any guide to the future, it is reasonable to expect that they will continue.⁵⁵ The pendulum may be swinging away from the strident nationalism of the national security state in the Southern Cone but its influence will remain in each of the countries that were involved with it. The national security state left a legacy of programs and of patriotic, nationalistic rhetoric. It permeated the media and school system so that the population at large has been exposed to its tenets even if the populace is not so convinced of its values as are the geostrategists in each country.⁵⁶

Southern Cone Cooperation

The strongly nationalistic geopolitical doctrines outlined earlier emphasize Ratzel's view of the state as a living organism struggling in a world where the fittest survive.⁵⁷ Such attitudes would seem to preclude compromise over any issue of the geopolitical significance that they attach to Antarctica. There is, however, a body of evidence to indicate that the Southern Cone nations present a common front in the defense of the American Quadrant of Antarctica against the pretensions of other nations to Antarctica. The majority of the nations of the Third World would have the continent exploited as the "common heritage of mankind," and many of the advanced industrialized powers advocate a policy of free access to the continent to whomever has the technology and capacity to take advantage of the presumed bounty. The nations of the Southern Cone are not unaware that their united efforts might salvage a significant share of their claims whereas intrasigence could cost them it all.

Argentina-Chile

As early as 1906 Argentina and Chile held inconclusive Antarctic delimitation talks but the matter was not seriously pursued until the 1940's.⁵⁸ Soon after Chile declared its Antarctic claim in November 1940, Argentina reminded Chile of its rights in the area and representatives of both nations met in March 1941 and agreed that a South American Antarctic exists and that the only countries with exclusive rights over it are Chile and Argentina.⁵⁹

In the wake of major Antarctic expeditions by both Argentina and Chile after World War Two, Great Britain proposed that the conflicting claims be submitted to the International Court of Justice at the Hague. Both Argentina and Chile rejected the proposal because, it is asserted, they maintain that the British have no rights in the area.⁶⁰ It is possible that there was some apprehension that their fairly recent activities would not be convincing in court against the British record of discovery and exploration, but that their cases could be expected to improve with time. Further, the nationalistic noise being made in both nations about Antarctica at the time had elevated the claims to such a point of honor that a serious reversal could have caused the González Videla or Perón governments to fall.⁶¹

The rejection of the British proposal was followed by the Donoso-La Rosa declaration of March 1948. In the joint declaration each country recognized the other's indisputable rights of sovereignty in the region between 25° and 90° West. They promised reciprocal cooperation in defending their Antarctic territories from outside powers and to eventually arrive at an agreement on demarcation.⁶²

The spirit of the Donoso-La Rosa declaration continued to characterize their bilateral relations vis-à-vis external actors even during the worst moments of the Beagle Channel crisis.⁶³ At the height of the confrontation in February 1978, Presidents Pinochet and Videla signed the Act of Puerto Montt which confirmed the Donoso-La Rosa declaration and agreed that the Beagle Channel dispute would have no effect in Antarctica.⁶⁴ In fact, articles one through six of the Beagle Channel Treaty--which deal with conciliation and arbitration--

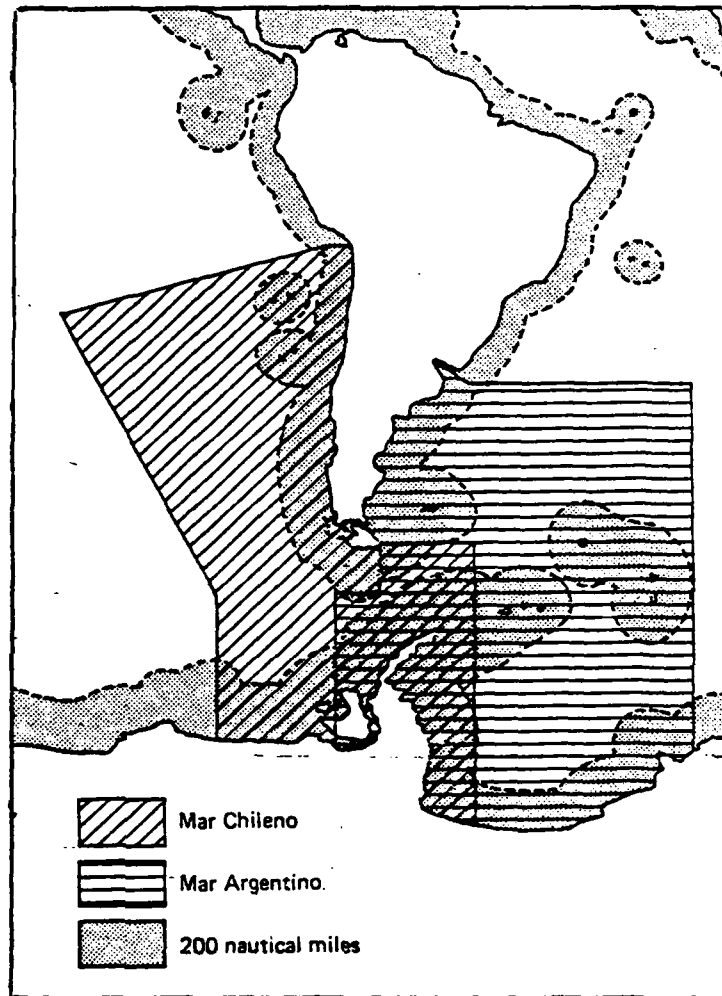
are applicable to Antarctica and reaffirm their mutual renunciation to the use of force south of 60°South.⁶⁵

While semi-official territorial seas continue to overlap significantly as seen in Figure 4-4, the conflict-oriented geopolitical doctrines which characterized Argentine military writers are being modified by the more cooperative, integrationist themes of some civilian and military writers, particularly during the Alfonsín presidency.⁶⁶ These writers consider Chile a partner in the defense of the Cape Horn Passages and Antarctica. New thoughts in Argentine strategy tend toward full cooperation with Chile to the exclusion of extraregional powers. In June 1985 the two governments held bilateral talks on Antarctic cooperation and reaffirmed that they had put aside their differences and declared that they would present a joint position in future international meetings on Antarctica.⁶⁷

Chilean geopolitical thinking has not undergone the same conversion as its Argentine counterpart, but must be somewhat more flexible in their relations with Argentina because of Chile's international isolation and relative military weakness. Many still express profound distrust of Argentine motives and suspect that the nationalists in Buenos Aires want to cut Chile out of the Antarctic entirely, but most of even the stoutest Chilean nationalists now advocate a common front to protect the nations' mutual Antarctic interests (el litigio austral).⁶⁸

The Regional Front

Brazil has been drawn into the new spirit of cooperation as well. The Argentines and Brazilians worked out the awkward moments following



SOURCE: Michael A. Morris, "Maritime Geopolitics in Latin America," *Political Geography Quarterly* 5 (January 1986):50.

FIGURE 4-4
TERRITORIAL SEAS AND 200 NM ZONES

the January 1983 detention of an Antarctica-bound Brazilian vessel in the Beagle Channel--something which might have been a major incident five years earlier. The Falklands War actually accelerated the cooperative trend begun by the settlement of the Itaipú Dam controversy. The Argentine military government undertook a "Latinamericanization" of its foreign policy and sought out Brazil in spite of the latter's lack of official endorsement during the war.⁶⁹

In October 1984 the military defense forum of Unidad Argentina Latinamericana, with delegates from most Latin American countries, adopted the following proposals:

i) To assure that the exploitation of their own natural resources render the maximum benefits to the people of the Latin American countries.

j) To champion the sovereignty of the Latin American Antarctic Sector as a reserve for future exploitation supporting the formation of a common strategy and joint operations in the zone as a way of preserving it from the interests of imperialist dominion.⁷⁰

A distinct trend toward a regional policy for Antarctica is now evident. In addition to the politically inexpensive declarations, statements, and proposals mentioned above Argentina and Chile have taken tangible steps which indicate their commitment to a common regional, rather than national, Antarctic future. Brazil and Uruguay were admitted to Antarctic Treaty Consultative Party status in 1983 and 1985, respectively. Their admissions had to have been conferred by unanimous vote and gave them a voice in the Treaty regime equivalent to that which Argentina and Chile have enjoyed since 1961.⁷¹ Chilean support of Brazil's Consultative Party status (but not of Uruguay's) might be arguable from the perspective of old

rivalries and alliances, but it is more likely that the two Southern Cone claimants have decided to base their future Antarctic strategy on a regional basis even at the cost of diluting their vote in the meetings of the Consultative Parties to the Antarctic Treaty.

In sum, the Argentines and Chileans have historically cooperated in their Antarctic strategies vis-à-vis outside powers but in recent years have increasingly sought to co-opt potential adversaries to create a larger block to protect and share in the American quadrant.

Summary

Antarctica figures prominently in the geopolitical analyses of writers from Argentina, Chile, and Brazil both for its strategic significance and as a source of future economic benefits. The geopolitical interest in Antarctica has endured for a considerable historical period in both countries and will continue even though the manifestations of that interest have evolved. Even during the most stridently nationalistic epochs, bilateral cooperation has, at least to some extent, continued. There are indications that national interests are now being pursued, in part, through regional approaches to the administration of the American quadrant.

Notes

¹John Child, "Geopolitical Thinking in Latin America," Latin American Research Review 14 (1979):89.

²Ibid., p. 95.

³César N. Caviedes, The Southern Cone: Realities of the Authoritarian State in South America (Totowa, NJ: Rowman & Allenheld, 1984), pp. 144-5.

⁴Howard T. Pittman, "Chilean Foreign Policy: The Pragmatic Pursuit of Geopolitical Goals," in The Dynamics of Latin American Foreign Policies, eds. Jennie K. Lincoln and Elizabeth G. Ferris (Boulder, CO: Westview Press, 1984), p. 133, notes that in the 1950's Chile first suggested that the correct demarcation between the Atlantic and Pacific was the immense loop of islands surrounding the Scotia Sea. Caviedes, p. 155, notes that some Argentines thought it likely that the British would hand the Falklands over to Chile rather than to Argentina.

⁵Juan E. Guglielmelli, Geopolítica del Cono Sur (Buenos Aires: El Cid Editor, 1979), pp. 63-71, presents an excellent summary of Admiral Storni's geopolitical writings.

⁶Martin Ira Glassner, "The View from the Near North--South Americans View Antarctica and the Southern Ocean Geopolitically," Political Geography Quarterly 4 (October 1985):331.

⁷Ibid., pp. 331, 3.

⁸Luis Antonio Morzone, Soberanía territorial argentina (Buenos Aires: Ediciones Depalma, 1978), p. 214.

⁹Fernando A. Milia, ed. La Atlantártida: un espacio geopolítico (Buenos Aires: Ediciones Pleamar, 1978), pp. 248-50.

¹⁰The British garrison on the Falklands and South Georgia usually consists of an infantry battalion with an additional company, batteries of field artillery and air defense artillery, an engineer squadron, and various combat support troops reports Robert A. Fox, Antarctica and the South Atlantic (London: British Broadcasting Corp. Publications, 1985), p. 217.

¹¹Bernardo Quagliotti de Bellis, "Geopolítica del Atlántico Sur," in La Atlantártida: un espacio geopolítico, ed. Fernando A. Milia (Buenos Aires: Ediciones Pleamar, 1978), pp. 35-7.

¹²Ibid., pp. 40-1.

¹³Carlos J. Moneta, "Antarctica, Latin America, and the International System in the 1980's," trans. Marjory Mattingly Urquidi, Journal of Interamerican Studies and World Affairs 23 (February 1981):35-6.

¹⁴Quagliotti de Bellis, pp. 40-1.

¹⁵Alfredo Bruno Bologna, "Argentinian Claims to the Malvinas under International Law," trans. Susanna Davies, Journal of International Studies 12 (Spring 1983):47.

¹⁶Augusto Pinochet Ugarte, Geopolítica, 2nd ed. (Santiago: Editorial Andres Bello, 1974), pp. 67-72.

- ¹⁷Mario Barros Van Buren, "La geopolítica en los postulados internacionales de Chile," Revista chilena de geopolítica no. 1 (1984):36-8.
- ¹⁸Glassner, p. 335; Francisco Ghisolfo Araya, "Influjo geopolítico de la Isla de Pascua," Revista chilena de geopolítica no. 2 (1985):42.
- ¹⁹Jack Child, Geopolitics and Conflict in South America: Quarrels among Neighbors (New York: Praeger Publishers, 1985), pp. 46, 53; tricontinentality is enshrined as geopolitical principle number five in "Principios geopolíticos de Chile," Revista chilena de geopolítica no. 1 (1984):25.
- ²⁰Ricardo Riesco Jaramillo, "Fronteras y tareas geopolíticas chilenas en el Océano Pacífico Sur y en el Continente Antártico," Revista chilena de geopolítica no. 2 (1985):23.
- ²¹Pittman, "Chilean Foreign Policy," pp. 132-3.
- ²²Riesco Jaramillo, p. 21.
- ²³Howard T. Pittman, "The Impact of Democratization on Geopolitics and Conflict in the Southern Cone," paper prepared for the 1985 meeting of the Latin American Studies Association, Albuquerque, NM, 18-20 April 1985, p. 49; Pittman, "Chilean Foreign Policy, p. 133, notes that the equivalence of land and sea precedent was set during the 1975-78 negotiations with Bolivia over sea access. Chile offered a corridor with a 200 nm limit but insisted on a compensatory area of equivalent size from Bolivia's land area. Interesting, Bolivia initially accepted the deal.
- ²⁴The coastline figures are taken from Ramón Cañas Montalva, "Chile, el más antártico de los países del orbe y su responsabilidad continental en el Sur-Pacífico," Revista geográfica de Chile no. 4 (Octubre de 1950):33.
- ²⁵Riesco Jaramillo, pp. 26-7.
- ²⁶El Mercurio (Santiago), ed. "El mito del principio bioceánico," Geosur (Montevideo) 51 (Febrero-Marzo 1984):4.
- ²⁷César José Marini, La crisis en el Cono Sur (Buenos Aires: Impresores SCA, 1984), p. 109, is a recent example of the Argentine phobia. He accuses President Pinochet of plotting to take the South Atlantic islands or divide them with the British and of having the secondary strategic objective of taking Patagonia as far north as the Río Chubut or at least the Río Diamante-Río Colorado line.
- ²⁸Barros Van Buren, pp. 37-8.
- ²⁹Oscar Pinochet de la Barra, La Antártida Chilena, 4th ed. (Santiago: Editorial Andrés Bello, 1976), p. 188.

³⁰Oscar Pinochet de la Barra, Antártica año 2000: nuevas perspectivas políticas y jurídicas," Economía y Sociedad (Santiago) 22 (Febrero 1984):19-23, cited by Wilfred A. Bacchus, "The South Atlantic War as a 'Tip of the Iceberg': The ABC Countries' Expansionist Interests in the Southern Atlantic Region," paper prepared for the annual meeting of the Midwest Association for Latin American Studies, Columbia, MO, 20-1 September 1985, p. 5.

³¹Riesco Jaramillo, p. 26.

³²Child, "Geopolitical Thinking," p. 90.

³³Michael A. Morris, "Maritime Geopolitics in Latin America," Political Geography Quarterly 5 (January 1986):45.

³⁴Philip L. Kelly, "Geopolitical Themes in the Writings of General Carlos de Meira Mattos of Brazil," Journal of Latin American Studies 16 (November 1984):453.

³⁵Glassner, p. 337.

³⁶Caviedes, p. 150.

³⁷Pittman, "Impact of Democratization," p. 35.

³⁸Glassner, p. 338.

³⁹United Nations, General Assembly, 39th Session, 29 October 1984. Question of Antarctica: Report of the Secretary General (A/39/583), part 2, vol. I, p. 10, lists the permanent Argentine bases as Orcadas (1904), Brown (1951), San Martin (1951), Esperanza (1952), Marambio (1969), Belgrano 2 (1970), Belgrano 3 (1980), and Jubany (1982).

⁴⁰Robert E. Wilson, "National Interests and Claims in the Antarctic," Arctic 17 (March 1964):25.

⁴¹Marshall Van Sant Hall, "Argentine Policy Motivations in the Falklands War and the Aftermath," Naval War College Review 36 (November-December 1983):28.

⁴²Marc Leepson, "The Future of Antarctica," Editorial Research Reports 1 (June 1982):472.

⁴³Van Sant Hall, p. 32.

⁴⁴F.M. Auburn, Antarctic Law and Politics (Bloomington: Indiana University Press, 1982), p. 55.

⁴⁵Clarence da Gama Pinto, "Battle for the Treasures of the Last Frontier on Earth," South, September 1983, p. 39.

⁴⁶An interesting if polemical point is whether Argentina violated the demilitarization provisions of the Antarctic Treaty during the war. Some writers, including David W. Heron, "The Falklands and the Antarctic Treaty," Military Science and Technology 2 (June 1982):20, assure us that they did not because the Falklands lie fully 700 miles north of 60°S. On the other hand, Arthur Gavshon and Desmond Rice, The Sinking of the Belgrano (London: Martin, Secker & Warburg, 1984), p. 24, point out that the South Georgia invasion force arrived from Antarctica carrying three landing craft, one helicopter, and a fully equipped force of over 100 marines under Captain [sic] Alfredo Astiz. The ship carrying the force flew the pennant of the Argentine Navy's Senior Officer, Antarctic Squadron.

⁴⁷William Touhy, "Falklands Islands Outlook Founders on Key Item: Sovereignty," Los Angeles Times, 9 February 1984, in Information Services on Latin America 28 (February 1984):313.

⁴⁸Fox, pp. 327-8.

⁴⁹"Alfonsoín Launches Big Drive South," Latin America Weekly Report, 18 April 1986, pp. 2-3.

⁵⁰Barros Van Buren, pp. 34-5.

⁵¹Pittman, "Chilean Foreign Policy," p. 131.

⁵²James L. Garrett, "Confrontation and Negotiation in the Southern Cone," Journal of Interamerican Studies and World Affairs 27 (Fall 1985):83.

⁵³Ibid., p. 84.

⁵⁴Ibid., pp. 103-4; Pittman, "Impact of Democratization," pp. 51-5.

⁵⁵Pittman, "Chilean Foreign Policy," p. 135.

⁵⁶John Child, "Inter-State Conflict in Latin America in the 1980's," in The Dynamics of Latin American Foreign Policies, eds. Jennie K. Lincoln and Elizabeth G. Ferris (Boulder, CO: Westview Press, 1984), p. 32.

⁵⁷Child, "Geopolitical Thinking," p. 102.

⁵⁸The 1906 discussions were conducted between Anadón and Puga Borne notes Morzone, p. 139.

⁵⁹The representatives were Julio Escudero Guzmán (Chile) and Isidoro Ruíz Moreno (Argentina) notes Wilson, p. 32.

⁶⁰Morzone, p. 133.

⁶¹E.W. Hunter Christie, The Antarctic Problem: An Historical and Political Study (London: George Allen & Unwin, Ltd., 1951), p. 293.

⁶²Morzone, p. 133; Auburn, p. 56.

⁶³Moneta, pp. 51-2.

⁶⁴Auburn, p. 56; Embassy of the Argentine Republic, Argentina, Chile: Present Situation on the Border Controversy in the Southern Region (Washington, DC: n.p., 1978), p. 3.

⁶⁵Pittman, "Impact of Democratization," p. 52.

⁶⁶Garrett, p. 30.

⁶⁷"Argentina/Chile," Latin American Regional Reports: Southern Cone, 28 June 1985, p. 8.

⁶⁸Pittman, "Impact of Democratization," p. 54; Riesco Jaramillo, p. 27.

⁶⁹Wayne A. Selcher, "Brazilian-Argentine Relations in the 1980's: From Wary Rivalry to Friendly Competition," Journal of Interamerican Studies and World Affairs 27 (Summer 1985):30-1.

⁷⁰Pittman, "Impact of Democratization," p. 73.

⁷¹Philip W. Quigg, Antarctica: The Continuing Experiment, Headline Series, no. 273 (New York: Foreign Policy Assoc., 1985), p. 21.

CHAPTER 5 REALISM, THE SOUTHERN CONE, AND ANTARCTICA

Antarctica is both a global issue to the world at large and a regional issue of importance to the nations of the Southern Cone. The American quadrant in particular has been the scene of nationalistic competition between Argentina, Chile, and Great Britain in the decades before the Antarctic Treaty suspended the most overt competition.

During the quarter century that the Treaty has kept the peace, new pressures have been developing which may lead to radical changes in the way that Antarctica is administered after 1991. Extractive technology has advanced to the point where oil and hard mineral exploitation is conceivable and lacking only economic incentives and political guarantees before beginning commercial exploration in earnest. Nationalistic theories espoused by certain Southern Cone geopolitical writers and the legacy of the national security states have heightened the perception that Antarctica is vital component of national destinies. At the same time, agitation by Third World countries outside the Treaty calling for Antarctica to be treated as the common heritage of mankind has increased uncertainty about the form of the eventual regime that will administer the region.

The problem for Argentina and Chile is how to protect and advance their respective interests against each other, other regional powers, the advanced industrialized states, the common heritage of mankind adherents, and the world park proponents. In short, the two Southern

Cone claimants seek to maximize the benefits which they might realize from Antarctica while not irreparably damaging other national interests by intransigence on the narrow issue of Antarctica in dealing with other powerful or numerous states.

The purpose of this chapter is to apply the "realist perspective" of interstate relations to several scenarios for the future of Antarctica and to predict the likely course of Argentine and Chilean policies toward the region over the next several decades.

On Realism

Realism is a useful perspective for analyzing the political interaction of states as it affords a framework for analysis which transcends the different motives, preferences, and intellectual and moral qualities of individual statesmen. Hans J. Morgenthau claims irrefutable historical evidence for the validity of political realism and outlines its fundamental tenets. Political realists believe that politics is governed by objective laws that have their roots in human nature and that have changed little throughout history. Secondly, realism defines national interest in terms of power and rational statecraft as a means of expanding national power without regard to ideology or other motives. A rational statesman cannot permit moral principles to override national interests without risking grave consequences for his country. Lastly, realists hold that political factors dominate interstate relations, but are modified by economic, moral, and religious considerations. While Morgenthau's tenets of realism do not assume that the nation-state is a permanent feature in political relations the time period under consideration in this thesis

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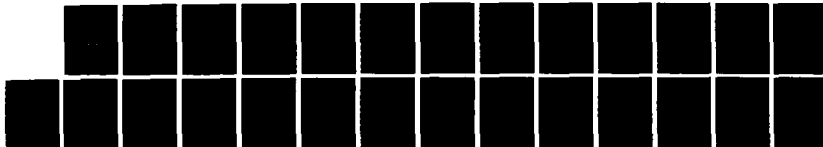
THE SOUTHERN CONE AND ANTARCTICA STRATEGIES FOR THE
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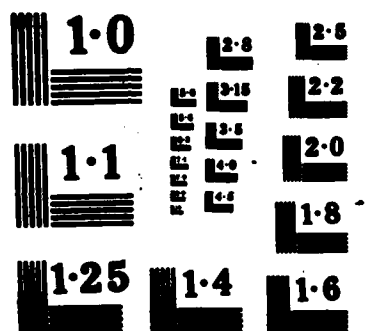
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is sufficiently brief that the nation-state may be assumed to be the predominant type of world actor.¹

Steven D. Krasner builds on the foundations of the school of political realism and presents valuable insights into the application of the realist perspective to the study of the objectives, limitations, and strategies of Third World states in their international relations. He is particularly helpful in explaining the nature of Third World dealings with international organizations which were originally founded and dominated by the advanced capitalist countries.

Krasner's discussion of the factors motivating Third World countries is applicable to the study of Argentina and Chile. He asserts that "[Third World countries] are behaving the way states have always behaved; they are trying to maximize their power--their ability to control their own destinies."² His perspective is that the defining characteristics of Third World states are their political and military weakness as well as economic vulnerability vis-à-vis Northern industrialized states. Beyond the minimalist objectives of preserving territorial and political integrity which all states share, Third World states additionally seek to maximize both wealth and control in an unstable milieu. If the choice must be made between control and wealth, Krasner contends that Third World states will overwhelmingly opt for control as it is of a more enduring nature than wealth. He leaves open the possibility though, that when a nation chooses to act within the extant institutional arrangement (relational power behavior), it might pursue short term wealth maximization

strategies. It is rarely a stark question of sacrificing wealth for control or vice versa as the two are almost invariably intertwined.³

Krasner deals with the Antarctic Treaty regime at some length and clearly states that the Southern Cone nations are of the Third World for his purposes.⁴ A truly satisfactory categorization of the nations of the world remains to be produced, but for the purposes of this work it is unnecessary to belabor the controversy beyond asserting that they are both developing countries as they have both officially testified.⁵ As such, they can be expected to pragmatically exercise the political advantages to be gained by exhortations to Third World solidarity while at the same time invoking their special relationship with the North that is the legacy of historical ties and Consultative Party status within the Antarctic Treaty.

Jorge I. Domínguez complements Krasner's work by focusing on the recent evolution of Latin American foreign policies. Domínguez convincingly asserts that the thrust of Latin American foreign policies has shifted away from the globalism of the 1970's to more modest and pragmatic objectives based on critical assessments of the capabilities of the states. Economic objectives remain both a means and an end of statecraft, but new political and military objectives have appeared in foreign policies. The clearer identification of national priorities is based on a more prudent assessment of the balance between foreign policy goals and means. In sum, Domínguez' argument is that the reorientation of Latin American foreign policies has put economic policy at the service of political objectives. While the overall amount of effort devoted to foreign policy has not

diminished, national resources are now more narrowly and tenaciously concentrated on the immediate regional subsystem and only a few global issues of greatest relevance to the individual nations' policy objectives.⁶

The significance of Krasner's and Domínguez' analyses is that they help us to understand the Argentine and Chilean strategies toward their mutual, yet competitive, foreign policy goals of maximizing their Antarctic interests. They can be expected to follow pragmatic policies tailored to their national capabilities which they expect will increase their control over their national destinies. The American quadrant of the Antarctic is both a regional subsystem and a global issue of importance to both nations as control and successful exploitation of the region would vastly enhance the political and economic stature of its owner well into the coming century.

Maximization Scenarios

One approach to predicting what strategies Argentina and Chile might employ to maximize control and wealth in the Antarctic is to dissect several possible scenarios. Each scenario can be evaluated as to its probable utility for maximizing national objectives which, by realist reasoning, ought to correlate closely with strategies which will actually be followed. The scenarios presented below by no means exhaust the possibilities. Political imperatives of those close to the policy making centers in Buenos Aires and Santiago may impart additional urgency to factors considered here or introduce new short term considerations entirely as the two governments see to their basic imperative of regime preservation.

Unilateral Occupation

An initiative by either Argentina or Chile to physically limit or deny access by others to its claimed Antarctic territory is the most radical strategy for the resolution of the sovereignty issue. Such a move would inevitably involve the armed forces as air and naval forces would be called upon both to insure the integrity of territorial waters and airspace and to provide logistical support for ground forces occupying the continent.

This strategy has the advantage of offering the possibility of absolutely maximizing both political control and wealth in the quadrant. Sovereignty having been established, the geopolitical objectives of the strongly nationalistic writers summarized in the previous chapter would be achieved, and the strategic advantages which they attribute to Antarctica would enhance their strategic position in the world. Absolute sovereignty also affords the states the right to exploit the resources of the continent and the economic exclusion zone offshore on its own terms. Whether the extraction is carried out by the sovereign or by foreign entities under license the controlling state can regulate the flow of wealth to its advantage.

The high payoff of the unilateral occupation strategy is more than outweighed by its high costs and low probability of success. The introduction of military and naval forces is clearly a violation of the Antarctic Treaty. A unilateral assertion of sovereignty would directly challenge not only the other claimants, but also Brazil, China, Poland, Uruguay, the Soviet Union, and the United States who also maintain stations in the American quadrant. The majority of nonclaimant states of the Third World lean toward the common heritage

of mankind approach and, while they generally object to control of Antarctica by the limited group of Antarctic Treaty Consultative Parties, they are unlikely to acquiesce to having that control slip from the Treaty regime--from which they could hope to wring concessions--to the sovereignty of a single state. The only possible support for unilateral action might be from claimants from outside the American quadrant. Any sympathy that they might demonstrate would be tempered by their minority position and the fact that they all recognize the British claim in the American quadrant.

Unilateral occupation would involve the perpetrator in an exceedingly difficult military situation. Both Argentina and Chile have creditable armed forces which are formidable in a regional context, but could not begin to contest many of the powers that they would cross by unilateral action. Not only could the forces committed to the Antarctic be quickly isolated by superior air and naval forces, but the forces which the initiator could concentrate on its southern front would be limited because of the need to defend against traditional South American rivals.

Political considerations in either nation might incline decision makers to adapt higher risk strategies in order to preserve their government. Such strategies would tend to assume a low likelihood that unilateral action would be opposed by more than resolutions and condemnations which reflect opinion, but have no measurable effect on deployed forces. Unilateral occupation could conceivably be a risky device for legitimizing a faltering Argentine or Chilean regime.

Argentina's democratic experience under President Raúl Alfonsín has been a qualified success thus far. The Radical president has done

much to foster sober enthusiasm for the democratic process and has attacked many of the nation's economic woes. Still, many serious social and political challenges remain and Argentine democracy remains fragile.

The burden of the foreign debt or the failure of the Plan Austral could result in political and economic reverses of sufficient severity to truncate Alfonsín's tenure and install a new administration with the perceived need to legitimize itself by nationalistic initiatives. To be sure, it is problematic whether sufficient popular enthusiasm could be generated by nationalistic adventurism in the Antarctic to legitimize either a faltering democratic regime or a nonelected successor. It is not inconceivable, however, that a combination of factors including dissatisfaction with progress on the debt situation, an impasse over the transfer of the Falklands under a successor to the Thatcher government, and uncertainty over the disposition of Antarctica after the Treaty comes open to amendment in 1991 could inspire some nationalist elements to seriously consider unilateral action. The lessons of the Falklands War might be reinterpreted by the rising generation of Argentine officers not as an example of the futility of aggression, but as a case of what to do differently the next time.

In the case of Chile it is possible that the geopolitically oriented President Pinochet could try to legitimize his beleaguered regime by some sort of nationalistic initiative, but that is not likely. His highly personalistic administration has become increasingly isolated as groups who initially supported him have drifted into opposition. There are indications that serious political

divisions have developed even between the armed services with the air force, navy, and national police favoring amendments to Pinochet's timetable for elections and only the army remaining in apparently unswerving support.⁷ It is difficult to conceive of Pinochet seriously contemplating operations in the Antarctic without absolute confidence in the enthusiasm of the critical naval and air arms.

In sum, while the successful unilateral occupation of the American quadrant of Antarctica by either Argentina or Chile would maximize both control and wealth, the low probability of success makes such a move unlikely under current circumstances. Domestic pressures for regime legitimization or simple miscalculation by decision makers could change the equation. Additionally, external conditions such as an extreme political or military crisis which draws the world's attention away from Antarctica for a period of time, or some assurances by a powerful patron state--such as between the USSR and Argentina--that it would use its influence to prevent opposition in reaction to unilateral action might make Antarctic occupation more attractive.⁸

Internationalization

At the other extreme from unilateral occupation of the Antarctic claim is the scenario under which Argentina or Chile would cede its interests in the region to an authority empowered to exploit it as the common heritage of mankind or preserve it as a world park. Such a generous strategy is unlikely from a realist point of view as simple internationalization would cost the former claimant both control and wealth.

A world developmental authority would take away sovereignty over the continent and divide any eventual wealth in such a way that could not help but to be to Argentina and Chile's disadvantage. Whether the proceeds were apportioned to the former claimants as single member states among the 150 or so in the world, or in some proportion to their population the wealth to be realized would be so diluted as to be practically worthless.⁹

The scenario of a world park regime for Antarctica is equally unattractive from a realist point of view as control would be lost and, since world park proposals prohibit any sort of development, no wealth could be realized.

It is possible that some arrangement could be worked out within the framework of internationalization schemes by which Argentina or Chile could be accorded special consideration, but inevitably a large measure of control would be lost to the administering authority and the unfavorable distribution of wealth would be a constant irritant. Argentine and Chilean acceptance of internationalization is insupportable from a realist perspective and would require reversals of current policies under which both countries have vowed not to participate in any regime other than the Antarctic Treaty.¹⁰

Continuation of the Existing Treaty Regime

While both Southern Cone claimants would prefer recognition of their sovereignty in Antarctica, indeed their interests may be best served by preserving and working within the Antarctic Treaty. The extant regime has the advantage of preserving members' claims to sovereignty under the suspension provisions of Article IV. The

claimants are constrained from exercising sovereignty, but it is in no danger of being irrevocably lost while the Treaty is in force.

Economic exploitation of Antarctic nonrenewable resources is not imminent, and the Sealing Convention and the Canberra Convention offer the strong possibility that a similar, cordial arrangement might be worked out among the Consultative Parties by the time that discoveries and technological development warrant it.

The nature of the Treaty regime is to Argentina and Chile's advantage for benefit maximization, given real world constraints. Consultative Meetings are secret so the 16 parties can protect their national interests within a small group of equals and free from the scrutiny of domestic public opinion or the non-Consultative Party nations. Because decisions are reached by consensus both Argentina and Chile enjoy disproportionate influence by their ability to hold out against the majority and prevent a decision until their wishes are satisfied.¹¹ The two nations' announced intention to present a joint position in international forums alluded to earlier must give them additional weight in Treaty deliberations.

There are disadvantages as well in working within the Treaty regime. The original membership was 12, seven of which were claimant states. With the admission of Poland, West Germany, Brazil, India, China, and Uruguay a clear majority by 1986 lay with the nonclaimant states. Even with the protections given minority positions by Treaty procedures Consultative Party deliberations could become less friendly to claimants' interests if one or more militant aspirants to Third World leadership should violate the understandings by which the Treaty has operated.¹²

The Treaty suspends the question of sovereignty and may ultimately not be able to work out the contending interests of claimant states, free access proponents, and common heritage adherents. Working within the framework of the Consultative Party meetings is not costing Argentina or Chile anything in terms of control or wealth in the meantime and that, in itself, has got to be attractive to those nations' policy makers.

A South American Bloc

The idea that a number of South American countries might be able to cooperate in pursuing their national interests in the American quadrant has gained acceptance among some writers from the Southern Cone. Although only Argentina and Chile of the South American states have officially staked claims, other countries have expressed varying degrees of interest. As was mentioned earlier, Brazil and Uruguay have year-round bases and are Consultative Parties. Ecuador has officially expressed its interest in an Antarctic sector.¹³ Peru has acceded to the Antarctic Treaty, but is officially in favor of the common heritage of mankind position, as are Bolivia and Surinam.¹⁴

Certainly any serious movement in the direction of an exclusive regional bloc is embryonic and will face daunting problems in overcoming old rivalries. Still, there has been some acceptance of an exclusive South American sector since World War Two, and the integrative direction that some Southern Cone geostrategists have adopted might tend to support this scenario.

A division of the American quadrant into a number of national slivers as proposed by the defrontação thesis is obviously

unattractive to both Argentina and Chile, and the defrontação proposal has not elicited any great enthusiasm among nonclaimant South American governments other than Brazil so it is an unlikely basis for a future regional arrangement.

There are a number of other ways in which a South American bloc might be constructed which would be to the advantage of both Argentina and Chile's objectives while simultaneously offering a better deal to the other South American participants than they could expect to receive under other proposed regimes. The most likely bloc construction is one by which the members recognize the Argentine and Chilean sovereignty in the quadrant and leave that as a bilateral issue for the two claimants to thrash out as has been their intention since the Donoso-La Rosa declaration. Other South American states have occasionally declared an Antarctic destiny, but none have the political, legal, or emotional attachment that the two claimants have developed over the years. In return for the political support for Argentine and Chilean sovereignty the other bloc members would receive a significant stake in the economic benefits which are likely to be realized from the Antarctic.

The South American bloc scheme would require considerable leadership, flexibility, and an unusual degree of cooperation. If such a common front were to form it could be a potent force either within the deliberations of the Treaty regime, where the four South American Consultative Parties might be a significant caucus for advancing their case and for blocking new members, or as a replacement body should the Treaty regime deteriorate in the coming decade.

From a realist perspective a South American bloc idea along the lines of the above framework has much to recommend it to both Argentina and Chile. Their sovereignty would be recognized by a number of neighboring nations and perhaps other Third World states if the North-South confrontational aspects were appealed to. While economic returns would not be as great as they would be if not shared among bloc members the dilution is considerably less than in world wide common heritage approaches. In any case, exploitation is some years in the future so any sharing is remote. Any exploitation would be brought closer though if the bloc were to remove the political uncertainty that now inhibits investment in the absence of a clear sovereign. A South American bloc satisfies the realist objectives of maximizing control over the Antarctic claim while minimizing the sacrifices in terms of wealth which are now only speculative anyway. Additional spinoff legitimizing benefits may accrue from the regional cooperation and anti-North aspects of the strategy.

The South American bloc strategy is not something which can be expected to succeed easily. Both the Northern industrialized states and the Third World common heritage proponents are likely to resist. Northern resistance may be ameliorated and fragmented if influential business interests there were to see a role for themselves in a South American quadrant. Antarctica is not of major interest to the North while in the Southern Cone it is of greater regional and global importance. The nations of the Third World may be somewhat mollified by South American arguments that, as developing countries, they are only interested in their quadrant and there are three other quadrants which can be administered as the common heritage of mankind.

Analytic Conclusions

By applying a realist perspective to four scenarios which might be pursued by Argentina or Chile it is possible to arrive at a clearer understanding of those nations' likely strategies for the next several decades. Much of the volume of legal argument, appeals to geographic proximity and geological affinity, sector theory, and effective occupation are interesting of themselves and important as indicators of policies supporting the realist objectives of maximizing control and wealth. As Carlos J. Moneta pithily observed, "The subsoil of the legal flora is made up of a layer of realpolitik."¹⁵

Table 5-1 illustrates each of the four scenarios with respect to its utility for satisfying realist objectives, the feasibility of the scenario being implemented under current world conditions, and its likelihood of adoption as Antarctic policy by either Argentina or Chile.

TABLE 5-1
ANTARCTIC SCENARIO MATRIX

Strategy	Satisfies Objectives	Feasibility	Probability of Adoption
1. Unilateral Occupation	yes	low	low
2. Internationalization	no	possible	low
3. Continue w/i Treaty	possible	probable	high
4. South American Bloc	probable	possible	mod. high

The possibility of a unilateral occupation of the American quadrant by either Argentina or Chile is considered highly unlikely because, while the realist objectives are maximized by success, the likelihood of success in such a venture must be regarded as very low given current world conditions. Had the British not defeated the Argentines in the Falklands War, however, the lessons of the rewards of armed action to settle territorial disputes in regions remote from Northern power centers might have been quite different.

Adoption of a strategy to support yielding Antarctic rights to a world developmental authority or to a world park service seems highly unlikely because either scheme would be detrimental to realist objectives.

The Antarctic Treaty regime offers the best existing vehicle for furthering the realist objectives of Argentina and Chile because it does not threaten their claims to sovereignty, affords them an influential voice in control and a strong position from which to participate in future wealth. The Antarctic Treaty regime is also attractive because it is supported by the majority of advanced industrialized states.

A bloc of South American nations forming a common front on Antarctic policy presents intriguing possibilities for maximizing both control and wealth, but such an arrangement would require unprecedented cooperation and compromise. A bloc is unlikely as long as the Treaty regime is effective in managing contending interests. If the Treaty regime disintegrates or threatens Argentine and Chilean interests such a bloc would become more likely.

In sum, the Argentines and Chileans cannot impose their will on other nations that currently maintain an interest in Antarctica, but within the Antarctic Treaty they are in a position to influence that body and effectively prevent measures detrimental to their objectives. By their uncompromising assertions of sovereignty they keep the future of the region sufficiently uncertain to inhibit investment in commercial prospecting which could draw increased Northern interest.¹⁶

It is tempting for North American observers to dismiss the Southern Cone countries' national interests in Antarctica as just so much Latin posturing over a frigid wasteland which they cannot possibly use. It is well to remember that

In the Latin American mentality where dreams and wishes unfortunately have the same compelling power as reality; and where the principle prevails that just by putting forward a claim, a nation acquires an unquestionable right to it, all this maneuvering becomes enormously serious. Illogical as this way of arguing may be, a great many of the unresolved territorial questions in South America have arisen precisely from the entrenched belief that claim is synonymous with irrefutable right.¹⁷

The question of Antarctica was briefly raised as a peripheral issue of the Falklands War and receded after the recapture of Port Stanley. Whether North American analysts are prepared to address it or not, the question will become increasingly important in the years following 1991.

Notes

¹Hans J. Morgenthau, Politics among Nations, 5th ed., revised (New York: Alfred A. Knopf, Inc., 1978), pp. 4-15 *passim*.

²Steven D. Krasner, Structural Conflict: The Third World Against Global Liberalism (Berkeley: University of California Press, 1985), p. 12.

³Ibid., chap. 10 passim; Krasner, pp. 310-1, cites specific examples of Third World countries individually and as a group opting for control instead of wealth including the proposals by the Nixon administration to create a trusteeship zone for the oceans and resistance to population control norms. Both would have been of economic advantage but would have infringed on sovereignty.

⁴Ibid., p. 250.

⁵United Nations, General Assembly, 39th Session, 29 October 1984. Question of Antarctica: Report of the Secretary-General (A/39/583), part 2, vol. I, p. 24; United Nations, General Assembly, 39th Session, 2 November 1984. Question of Antarctica: Report of the Secretary-General (A/39/583), part 2, vol. II, p. 33.

⁶Jorge I. Domínguez, "The Foreign Policies of Latin American States in the 1980's," in Global Dilemmas, eds. Samuel P. Huntington and Joseph S. Nye, Jr. (Cambridge: Center for International Affairs, Harvard University and University Press of America, 1985), pp. 184-93 passim.

⁷"Army Chiefs Fight Reform Proposals," Latin America Regional Reports: Southern Cone, 18 April 1986, pp. 2-3. Recent discussions with Peru over reducing border troop strengths are seen as partly motivated by Pinochet's need for flexibility in deploying army units to face internal threats according to "Chile, Peru to Reduce Border Troops," Latin America Weekly Report, 28 March 1986, p. 6.

⁸Carte blanche by a powerful patron state does not seem likely as both the US and USSR have their own interests in the region. The US is probably perceived by both Argentina and Chile as unreliable since the Falklands War. It is barely possible that an Argentina-USSR deal might be struck with due consideration given to Soviet fishing interests and their presence near the Dufek Massif, but Aldo César Vaccs, Discreet Partners: Argentina and the USSR Since 1917, trans. Michael Joyce (Pittsburg: University of Pittsburg Press, 1984), p. 81, notes that in June 1981 at the Consultative Meeting in Buenos Aires relations between the two were at a very high point, yet the USSR still pointedly refused to recognize Argentine sovereignty over their Antarctic claim.

⁹M.J. Peterson, "Antarctica: The Last Great Land Rush on Earth," International Organization 34 (Summer 1980):390-401, offers interesting insights into claimant preferences.

¹⁰Peter J. Beck, "The United Nations' Study on Antarctica, 1984," Polar Record 22 (May 1985):502.

¹¹F.M. Auburn, Antarctic Law and Politics (Bloomington: Indiana University Press, 1982), p. 159.

¹²Some cracks in Consultative Party unanimity have already begun to appear. Elaine Sciolino, "Antarctic Treaty Nations Threaten to Boycott UN Debates," New York Times, 4 December 1985, p. 2, reports that India and China were the only two Consultative Parties not to boycott the vote on Antarctic resolutions in the UN General Assembly's 40th Session. Both voted to oust South Africa from the Treaty group. China abstained in the other two resolutions.

¹³The Ecuadoran sector is based on an imaginative adaptation of the sector principle by which the longitudinal extremities of the 200 nm EEZ around the Galapagos Islands is extended southward to the Pole according to Julio Tobar Donoso y Alfredo Luna Tobar, Derecho territorial ecuatoriano (Quito: Artes Gráficas Cia., Ltda., 1979), pp. 253-5. That the Tobar y Luna assertion is official policy is confirmed by Mario Ribadeneira, Ambassador of Ecuador, to the author, 21 November 1985, Author's files, Gainesville, Florida.

¹⁵Fred Parkinson, "Latin America and the Antarctic: An Exclusive Club," Journal of Latin American Studies 17 (November 1985):449.

¹⁵Carlos J. Moneta, "Antarctica, Latin America, and the International System in the 1980's," trans. Marjory Mattingly Urquidí, Journal of Interamerican Studies and World Affairs 23 (February 1981):33.

¹⁶Mark Newham, "Continental Wealth of the Continent Yet to Be Charted," Financial Times, 20 May 1982, in Information Service on Latin America 24 (May 1982):267, quotes Dr. Charles Swinbank, then head of the BAS Earth Sciences Division, as saying, "Without the assurance of legal ownership over their work, no investor in his right mind is going to put money into detailed exploration of the Antarctic."

¹⁷César N. Caviedes, The Southern Cone: Realities of the Authoritarian State in South America (Totowa, NJ: Rowman & Allenheld, Publishers, 1984), p. 150.

REFERENCES

- "Alfonsín Launches Big Drive South." Latin America Weekly Report, 18 April 1986, pp. 2-3.
- "Antarctic Post." Orlando (Florida) Sentinel, 3 January 1985, sec. A, p. 16.
- "Antarctic Research on Krill." Australian Foreign Affairs Record 55 (September 1984):910-1.
- "Antarctic Treaty: Australian Statements to the UN General Assembly." Australian Foreign Affairs Record 55 (November 1984):1227-32.
- Araya, Francisco Ghisolfo. "Influjo geopolítico de la Isla de Pascua." Revista chilena de geopolítica no. 2 (1985):40-50.
- "Argentina/Chile." Latin America Regional Reports: Southern Cone, 28 June 1985, p. 8.
- "Army Chiefs Fight Reform Proposals." Latin America Regional Reports: Southern Cone, 18 April 1986, pp. 2-3.
- Auburn, F.M. Antarctic Law and Politics. Bloomington: Indiana University Press, 1982.
- _____. "Gas y petróleo frente a la costa ("Off-Shore") en la Antártida." In Geopolítica y política de poder en el Atlántico Sur, pp. 161-94. Edited by Carlos J. Moneta. Buenos Aires: Editorial Pleamar, 1983.
- "Australian and the Antarctic Treaty System." Australian Foreign Affairs Record 55 (February 1984):90-7.
- Bacchus Wilfred A. "The South Atlantic War as a 'Tip of the Iceberg': The ABC Countries' Expansionist Interests in the Southern Atlantic Region." Paper prepared for the annual meeting of the Midwest Association for Latin American Studies, Columbia, MO: 20-1 September 1985.
- Barros Van Burne, Mario. "La geopolítica en los postulados internacionales de Chile." Revista chilena de geopolítica no. 1 (1984):33-9.

- Beck, Peter J. "Antarctica: A Case for the UN?" World Today 40 (April 1984):165-72.
- _____. "Britain's Antarctic Dimension." International Affairs 59 (Summer 1983):429-44.
- _____. "The United Nations and Antarctica." Polar Record 22 (May 1984):137-44.
- _____. "The United Nations' Study on Antarctica, 1984." Polar Record 22 (May 1985):499-504.
- Boczek, Boleslaw A. "The Soviet Union and the Antarctic Regime." American Journal of International Law 78 (October 1984):834-58.
- Bologna, Alfredo Bruno. "Argentinian Claims to the Malvinas under International Law." Journal of International Studies 12 (Spring 1983):39-47.
- Bourdeaux, Richart. "Pioneers' Life Among the Penguins Is Lonely." Washington Post, 22 November 1984. In Information Service on Latin America 29 (November 1984):424.
- "Brazil/Antarctica." Latin America Weekly Report, 28 March 1986, p. 12.
- Brennan, Keith. "Criteria for Access to the Resources of Antarctica: Alternatives, Procedure, and Experience Applicable." In Antarctic Resources Policy: Scientific, Legal, and Political Issues, pp. 217-27. Edited by Francisco Orrego Vicuña. Cambridge: Cambridge University Press, 1983.
- Browne, Malcolm W. "New Energy Ideas Emerge as Oil Reserves Dwindle." New York Times, 31 December 1985, p. 11.
- Cañas Montalva, Ramón. "Chile, el más antártico de los países del orbe y su responsabilidad continental en el Sur-Pacífico." Revista Geográfica de Chile no. 4 (Octubre de 1950):23-40.
- Caviedes, César N. The Southern Cone: Realities of the Authoritarian State in South America. Totowa, NJ: Rowman & Allenheld, 1984.
- Child, Jack. "Geopolitical Thinking in Latin America." Latin American Research Review 14 (1979):89-102.
- _____. Geopolitics and Conflict in South America: Quarrels Among Neighbors. New York: Praeger Publishers, 1985.
- Child, John. "Inter-State Conflict in Latin America in the 1980's. In The Dynamics of Latin American Foreign Policies, pp. 21-35. Edited by Jennie K. Lincoln and Elizabeth G. Ferris. Boulder, CO: Westview Press, 1984.

"Chile, Peru to Reduce Border Troops." Latin America Weekly Report, 28 March 1986, p. 6.

Christie, E.W. Hunter. The Antarctic Problem: An Historical and Political Study. London: George Allen & Unwin, Ltd., 1951.

Colacraí de Trevisán, Miriam. "Antártida: Geopolítica y Futuro." Estrategia 67/68 (Noviembre/Diciembre 1980, Enero/Febrero 1981):18-31.

_____. "Relaciones de poder y intereses internacionales en la Antártida antes del Tratado del 1959." Estrategia 66 (Septiembre/Octubre 1980):44-55.

Cura, María Renée, and Bustinza, Juan Antonio. Islas Malvinas, Georgias, Sandwich del Sur, y la Antártida Argentina. Buenos Aires: A-Z Editora, 1982.

Da Gama Pinto, Clarence. "Battle for the Treasures of the Last Frontier on Earth." South, September 1983, pp. 38-9.

Domínguez, Jorge I. "The Foreign Policies of Latin American States in the 1980's." In Global Dilemmas, pp. 161-98. Edited by Samuel P. Huntington and Joseph S. Nye, Jr. Cambridge: Center for International Affairs, Harvard University and University Press of America, 1985.

El Mercurio (Santiago), ed. "El mito del principio bioceánico." Geosur (Montevideo) 51 (Febrero-Marzo 1984):11-22.

Embassy of the Argentine Republic. Argentina, Chile: Present Situation on the Border Controversy in the Southern Region. Washington, DC: n.p., 1978.

Fox, Robert. Antarctica and the South Atlantic. London: British Broadcasting Corporation Publications, 1985.

Fraga, Jorge A. "El futuro incierto político-económico de la Antártida." In La Atlantártida: Un espacio geopolítico, pp. 225-35. Edited by Fernando A. Milia. Buenos Aires: Ediciones Pleamar, 1978.

_____. Introducción a la geopolítica antártica. Buenos Aires: Dirección Nacional del Antártico, 1979.

Garrett, James L. "The Beagle Channel: Confrontation and Negotiation in the Southern Cone." Journal of Interamerican Studies and World Affairs 27 (Fall 1985):81-109.

Gavshon, Arthur, and Rice, Desmond. The Sinking of the Belgrano. London: Martin, Secker, & Warburg, 1984.

Glassner, Martin Ira. "The View from the Near North--South Americans View Antarctica and the Southern Ocean Geopolitically." Political Geography Quarterly 4 (October 1985):329-42.

"Greenpeace Announces Bid to Make Antarctica a Park." New York Times, 30 January 1986, p. 4.

Guglielmelli, Juan E. Geopolítica del Cono Sur. Buenos Aires: El Cid Editor, 1979.

Guyer, Roberto E. "Antarctica's Role in International Relations." In Antarctic Resources Policy: Scientific, Legal, and Political Issues, pp. 267-79. Edited by Francisco Orrego Vicuña. Cambridge: Cambridge University Press, 1983.

Heron, David W. "The Falklands and the Antarctic Treaty." Military Science and Technology 2 (June 1982):20-1.

Instituto Geopolítico de Chile. "Principios geopolíticos de Chile." Revista chilena de geopolítica no. 1 (1984):20-32.

Joyner, Christopher C. "Anglo-Argentine Rivalry after the Falklands: On the Road to Antarctica?" In The Falklands War: Lessons for Strategy, Diplomacy, and International Law, pp. 189-211. Edited by Alberto R. Coll and Anthony C. Arend. Boston: George Allen & Unwin, 1985.

Kelly, Philip L. "Geopolitical Themes in the Writings of General Carlos de Meira Mattos of Brazil." Journal of Latin American Studies 16 (November 1984):439-61.

Kimball, Lee. "La carrera por la pesca antártica está en marcha." In Geopolítica y política de poder en el Atlántico Sur, pp. 195-223. Edited by Carlos J. Moneta. Buenos Aires: Editorial Pleamar, 1983.

Knox, George A. "The Living Resources of the Southern Ocean." In Antarctic Resources Policy: Scientific, Legal, and Political Issues, pp. 21-60. Edited by Francisco Orrego Vicuña. Cambridge: Cambridge University Press, 1983.

Krasner, Stephen D. Structural Conflict: The Third World Against Global Liberalism. Berkeley: University of California Press, 1985.

Leepson, Marc. "Future of Antarctica." Editorial Research Reports 1 (June 1982):471-88.

Lovering, J.F., and Prescott, J.R.V. Last of Lands . . . Antarctica. Melbourne: Melbourne University Press, 1979.

Luard, Evan. "Who Owns the Antarctic?" Foreign Affairs 62 (Summer 1984):1175-93.

Marini, César José. La crisis en el Cono Sur. Buenos Aires: Impresores SCA, 1984.

- Martin, Douglas. "Has Canada Lost Its Oil Gamble?" New York Times, 9 February 1986, sec. F, p. 4.
- Merino, Castro, José T. "Visión geopolítica de Chile en el futuro del Pacífico." Revista chilena de geopolítica no. 3 (1985):15-31.
- Milensky Edward S., and Schwab, Steven I. "Latin America and Antarctica." Current History, February 1983, pp. 52-3, 89-90.
- Milia Fernando A., ed. La Atlantártida: Un espacio geopolítico. Buenos Aires: Ediciones Pleamar, 1978.
- Mitchell, Barbara. "Cracks in the Ice." Wilson Quarterly 4 (Autumn 1981):69-87.
- Moneta, Carlos J. "Antarctica, Latin America, and the International System in the 1980's." Translated by Marjory Mattingly Urquidi. Journal of Interamerican Studies and World Affairs 23 (February 1981):29-68.
- Morgan, Michael. "Antarctica: Awaiting the Competition." Defense and Foreign Affairs Digest no. 7 (1979):34-6.
- Morgenthau, Hans J. Politics among Nations. 5th ed., Revised. New York: Alfred A. Knopf, Inc., 1978.
- Morris, Michael A. "Maritime Geopolitics in Latin America." Political Geography Quarterly 5 (January 1986):43-55.
- Morzone, Luis Antonio. Soberanía territorial argentina. Buenos Aires: Ediciones Depalma, 1978.
- Newham Mark. "Continental Wealth of the Continent Yet to Be Charted." Financial Times, 20 May 1982. In Information Service on Latin America 24 (May 1982):267.
- O'Loughlin, Peter. "Greenpeace Wants to Make Antarctica a Global Park." Gainesville (Florida) Sun, 8 November 1985, sec. C, p. 5.
- Orrego Vicuña, Francisco, ed. Antarctic Resources Policy: Scientific, Legal, and Political Issues. Cambridge: Cambridge University Press, 1983.
- Parkinson, Fred. "Latin America and the Antarctic: An Exclusive Club." Journal of Latin American Studies 17 (November 1985):433-51.
- Peterson, M.J. "Antarctica: The Last Great Land Rush on Earth." International Organization 34 (Summer 1980):377-403.

Pinochet de la Barra, Oscar. "Evolución política-jurídica del problema antártico." Geosur (Montevideo) 51 (Febrero-Marzo 1984)11-22.

_____. La Antártida Chilena. 4th ed. Santiago: Editorial Andrés Bello, 1976.

Pinochet Ugarte, Augusto. Geopolítica. 2nd ed. Santiago: Editorial Andrés Bello, 1974.

Pittman, Howard T. "Chilean Foreign Policy: The Pragmatic Pursuit of Geopolitical Goals." In The Dynamics of Latin American Foreign Policies, pp. 125-35. Edited by Jennie K. Lincoln and Elizabeth G. Ferris. Boulder, CO: Westview Press, 1984.

_____. "Geopolitics in the ABC Countries: A Comparison." Paper prepared for the international meeting of the Conference of Latin American Geographers, Buffalo, NY, 16-8 October 1981.

_____. "The Impact of Democratization on Geopolitics and Conflict in the Southern Cone." Paper prepared for the 1985 meeting of the Latin American Studies Association, Albuquerque, NM, 18-20 April 1985.

"Progress Made towards Antarctic Agreement." Financial Times, 14 March 1985. In Information Service on Latin America 30 (March 1985):429.

Quagliotti de Bellis, Bernardo. "Geopolítico del Atlántico Sur." In La Atlantártida: Un espacio geopolítico, pp. 18-52. Edited by Fernando A. Milia. Buenos Aires: Ediciones Pleamar, 1978.

Quigg, Philip W. Antarctica: The Continuing Experiment. Headline Series, no. 273. New York: Foreign Policy Association, 1985.

_____. A Pole Apart: The Emerging Issue of Antarctica. New York: McGraw-Hill Book Co., 1983.

Ribadeneira, Mario, Ambassador of Ecuador to Author. 21 November 1985. Author's files, Gainesville, FL.

Riesco Jamarillo, Ricardo. "Fronteras y tareas geopolíticas chilenas en el Océano Pacífico Sur y en el Continente Antártico." Revista chilena de geopolítica no. 2 (1985):17-27.

Romero Julio, Pedro. "Presencia de Chile en la Antártica." Revista chilena de geopolítica no. 1 (1984):40-55.

Salisbury, David S. "Antarctica: Geopolitical Football." Technology Review 79 (March-April 1977):14, 80.

- Schwab, William S., and Tollerton, Harry M. "A New Focus on Antarctica." United States Naval Institute Proceedings 105 (December 1979):42-5.
- Sciolino, Elaine. "Antarctic Treaty Nations Threaten to Boycott UN Debates." New York Times, 4 December 1985, p. 2.
- Selcher, Wayne A. "Brazilian-Argentine Relations in the 1980's: From Wary Rivalry to Friendly Competition." Journal of Inter-American Studies and World Affairs 27 (Summer 1985):25-54.
- Shapley, Deborah. "Arctic, Antarctic: A Polarization of Interests." Sea Power, 15 April 1983, pp. 104-5.
- _____. The Seventh Continent: Antarctica in a Resource Age. Washington: Resources for the Future, Inc., 1985.
- Shusterich, Kurt M. "Antarctic Treaty System." International Journal 39 (Autumn 1984):800-27.
- Sollie, Finn. "Jurisdictional Problems in Relation to Antarctic Mineral Resources in Political Perspective." In Antarctic Resources Policy: Scientific, Legal, and Political Issues, pp. 317-25. Edited by Francisco Orrego Vicuña. Cambridge: Cambridge University Press, 1983.
- Sugden, David. Arctic and Antarctic: A Modern Geographical Synthesis. Oxford: Basil Blackwell, Publisher, Ltd., 1982.
- Sullivan, Walter. "Greenpeace Sending Team to Antarctica." New York Times, 3 December 1985, p. 17.
- Suter, Keith D. "The Antarctic: A Crisis for the 1980's?" Journal of the Royal United Services Institute for Defense Studies 126 (March 1981):39-43.
- Taubman, Philip. "Oil's Decline Seen Curbing Soviet Plans." New York Times, 10 March 1986, p. 34.
- Tobar Donoso, Julio, and Luna Tobar, Alfredo. Derecho territorial ecuatoriano. Quito: Artes Gráficas Cia., Ltda., 1979.
- Touhy, William. "Falklands Islands Outlook Flounders on Key Item: Sovereignty." Los Angeles Times, 9 February 1984. In Informatic Service on Latin America 28 (February 1984):313.
- United Nations. General Assembly, 39th Session, 31 October 1984. Question of Antarctica: Report of the Secretary-General (A/39/583).
- Vacs, Aldo César. Discreet Partners: Argentina and the USSR since 1917. Translated by Michael Joyce. Pittsburg: University of Pittsburg Press, 1984.

"The Value of the Antarctic Treaty System." Australian Foreign Affairs Record 55 (September 1984):905-9.

Van Sant Hall, Marshall. "Argentine Policy Motivations in the Falklands War and the Aftermath." Naval War College Review 36 (November-December 1983):21-35.

Whitefield, Mimi. "Penguins Giving Way to Babies and Families." Miami Herald, 6 December 1985, sec. A, p. 24.

Wilson, Robert E. "National Interests and Claims in the Antarctic." Arctic 17 (March 1964):15-31.

Zumberge, James H. "Mineral Resources and Geopolitics in Antarctica." American Scientist 67 (January-February 1979):68-77.

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